HYUNDAI

Diagnostic Trouble Codes

NEW 7TH EDITION

This special issue of TechNet Times features a listing of general Diagnostic Trouble Codes and their explanation. Included in the back of the magazine is a special Hyundai Diagnostic Trouble Code section. Keep this issue on hand for a handy DTC reference guide. Don't forget to visit

OBD-II trouble code table

- The following list covers all SAE defined standard P zero codes allocated at the time of publication.
- All OBD-II codes starting with P zero have standard meanings irrespective of vehicle make or model.
- Hyundai specific codes match shop manuals and Hyundai GDS at time of publication.

Trouble code	Fault location	Probable cause
P0000	No fault found	**—**
P0001	Fuel volume regulator control – circuit open	**Wiring, regulator control solenoid**
P0002	Fuel volume regulator control – circuit range/performance	**Wiring, regulator control solenoid**
P0003	Fuel volume regulator control – circuit low	**Wiring short to ground, regulator control solenoid**
P0004	Fuel volume regulator control – circuit high	**Wiring open circuit/short to positive, regulator control solenoid**
P0005	Fuel shut-off valve control – circuit open	**Wiring open circuit, fuel shut-off valve**
P0006	Fuel shut-off valve control – circuit low	**Wiring short to ground, fuel shut-off valve**
P0007	Fuel shut-off valve control – circuit high	**Wiring short to positive, fuel shut-off valve**
P0008	Engine position system, bank 1 – performance	**Mechanical fault**
P0009	Engine position system, bank 2 – performance	**Mechanical fault**
P0010	Camshaft position (CMP) actuator, intake/left/front, bank 1 – circuit malfunction	**Wiring, CMP actuator, ECM**
P0011	Camshaft position (CMP), intake/left/front, bank 1 – timing over-advanced/system performance	**Valve timing, engine mechanical fault, CMP actuator**
P0012	Camshaft position (CMP), intake/left/front, bank 1 – timing over-retarded	**Valve timing, engine mechanical fault, CMP actuator**
P0013	Camshaft position (CMP) actuator, intake/left/front, bank 1 – circuit malfunction	**Wiring, CMP actuator, ECM**
P0014	Camshaft position (CMP) actuator, exhaust/right/rear, bank 1 – timing over-advanced/system performance	**Valve timing, engine mechanical fault, CMP actuator**
P0015	Camshaft position (CMP) actuator, exhaust/right/rear, bank 1 – timing over-retarded	**Valve timing, engine mechanical fault, CMP actuator**
P0016	Crankshaft position/camshaft position, bank 1 sensor A – correlation	**Wiring, CKP sensor, CMP sensor, mechanical fault**
P0017	Crankshaft position/camshaft position, bank 1 sensor B – correlation	**Wiring, CKP sensor, CMP sensor, mechanical fault**
P0018	Crankshaft position/camshaft position, bank 2 sensor A – correlation	**Wiring, CKP sensor, CMP sensor, mechanical fault**
P0019	Crankshaft position/camshaft position, bank 2 sensor B – correlation	**Wiring, CKP sensor, CMP sensor, mechanical fault**
P0020	Camshaft position (CMP) actuator, intake/left/front, bank 2 – circuit malfunction	**Wiring, CMP actuator, ECM**
P0021	Camshaft position (CMP), intake/left/front, bank 2 – timing over-advanced/system performance	**Valve timing, engine mechanical fault, CMP actuator**
P0022	Camshaft position (CMP), intake/left/front, bank 2 – timing over-retarded	**Valve timing, engine mechanical fault, CMP actuator**
P0023	Camshaft position (CMP) actuator, exhaust/right/rear, bank 2 – circuit malfunction	**Wiring, CMP actuator, ECM**
P0024	Camshaft position (CMP), exhaust/right/rear, bank 2 – timing over-advanced/system performance	**Valve timing, engine mechanical fault, CMP actuator**
P0025	Camshaft position (CMP), exhaust/right/rear, bank 2 – timing over-retarded	**Valve timing, engine mechanical fault, CMP actuator**

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0026	Intake valve control solenoid circuit, bank 1 – range/performance	Wiring, intake valve control solenoid
P0027	Exhaust valve control solenoid circuit, bank 1 – range/performance	Wiring, exhaust valve control solenoid
P0028	Intake valve control solenoid circuit, bank 2 – range/performance	Wiring, intake valve control solenoid
P0029	Exhaust valve control solenoid circuit, bank 2 – range/performance	Wiring, exhaust valve control solenoid
P0030	Heated oxygen sensor (HO2S) 1, bank 1, heater control – circuit malfunction	Wiring, HO2S, ECM
P0031	Heated oxygen sensor (HO2S) 1, bank 1, heater control – circuit low	Wiring short to ground, HO2S, ECM
P0032	Heated oxygen sensor (HO2S) 1, bank 1, heater control – circuit high	Wiring short to positive, HO2S, ECM
P0033	Turbocharger (TC) wastegate regulating valve – circuit malfunction	Wiring, TC wastegate regulating valve, ECM
P0034	Turbocharger (TC) wastegate regulating valve – circuit low	Wiring short to ground, TC wastegate regulating valve, ECM
P0035	Turbocharger (TC) wastegate regulating valve – circuit high	Wiring short to positive, TC wastegate regulating valve, ECM
P0036	Heated oxygen sensor (HO2S) 2, bank 1, heater control – circuit malfunction	Wiring, HO2S, ECM
P0037	Heated oxygen sensor (HO2S) 2, bank 1, heater control – circuit low	Wiring short to ground, HO2S, ECM
P0038	Heated oxygen sensor (HO2S) 2, bank 1, heater control – circuit high	Wiring short to positive, HO2S, ECM
P0039	Turbo/super charger bypass valve, control circuit– range/performance	Wiring, bypass valve
P0040	Oxygen sensor signals swapped, bank 1 sensor 1/bank 2 sensor 1	Wiring
P0041	Oxygen sensor signals swapped, bank 1 sensor 2/bank 2 sensor 2	Wiring
P0042	Heated oxygen sensor (HO2S) 3, bank 1, heater control – circuit malfunction	Wiring, HO2S, ECM
P0043	Heated oxygen sensor (HO2S) 3, bank 1, heater control – circuit low	Wiring short to ground, HO2S, ECM
P0044	Heated oxygen sensor (HO2S) 3, bank 1, heater control – circuit high	Wiring short to positive, HO2S, ECM
P0045	Turbo/super charger boost control solenoid – circuit open	Wiring, boost control solenoid
P0046	Turbo/super charger boost control solenoid – circuit range/performance	Wiring, boost control solenoid, mechanical fault
P0047	Turbo/super charger boost control solenoid – circuit low	Wiring short to ground, boost control solenoid
P0048	Turbo/super charger boost control solenoid – circuit high	Wiring short to positive, boost control solenoid
P0049	Turbo/super charger turbine – over-speed	Mechanical fault
P0050	Heated oxygen sensor (HO2S) 1, bank 2, heater control – circuit malfunction	Wiring, HO2S, ECM
P0051	Heated oxygen sensor (HO2S) 1, bank 2, heater control – circuit low	Wiring short to ground, HO2S, ECM
P0052	Heated oxygen sensor (HO2S) 1, bank 2, heater control – circuit high	Wiring short to positive, HO2S, ECM
P0053	Heated oxygen sensor (HO2S), bank 1, sensor 1 – heater resistance	Wiring, HO2S
P0054	Heated oxygen sensor (HO2S), bank 1, sensor 2 – heater resistance	Wiring, HO2S
P0055	Heated oxygen sensor (HO2S), bank 1, sensor 3 – heater resistance	Wiring, HO2S
P0056	Heated oxygen sensor (HO2S) 2, bank 2, heater control – circuit malfunction	Wiring, HO2S, ECM
P0057	Heated oxygen sensor (HO2S) 2, bank 2, heater control – heater circuit low	Wiring short to ground, HO2S, ECM
P0058	Heated oxygen sensor (HO2S) 2, bank 2, heater control – circuit high	Wiring short to positive, HO2S, ECM
P0059	Heated oxygen sensor (HO2S), bank 2, sensor 1 – heater resistance	Wiring, HO2S
P0060	Heated oxygen sensor (HO2S), bank 2, sensor 2 – heater resistance	Wiring, HO2S
P0061	Heated oxygen sensor (HO2S), bank 2, sensor 3 – heater resistance	Wiring, HO2S

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Trouble code	Fault location	Probable cause
P0062	Heated oxygen sensor (HO2S) 3, bank 2, heater control – circuit malfunction	Wiring, HO2S, ECM
P0063	Heated oxygen sensor (HO2S) 3, bank 2, heater control – circuit low	Wiring short to ground, HO2S, ECM
P0064	Heated oxygen sensor (HO2S) 3, bank 2, heater control – circuit high	Wiring short to positive, HO2S, ECM
P0065	Air assisted injector – range/performance problem	Air assisted injector
P0066	Air assisted injector – circuit malfunction/circuit low	Wiring short to ground, air assisted injector, ECM
P0067	Air assisted injector – circuit high	Wiring short to positive, air assisted injector, ECM
P0068	Manifold pressure (MAP) sensor/Mass air flow (MAF) sensor – throttle position correlation	Wiring, MAP sensor, MAF sensor, mechanical fault
P0069	Manifold pressure (MAP) sensor – barometric pressure correlation	MAF sensor, mechanical fault
P0070	Outside air temperature sensor – circuit malfunction	Wiring, outside air temperature sensor, ECM
P0071	Outside air temperature sensor – range/performance problem	Outside air temperature sensor
P0072	Outside air temperature sensor – low input	Wiring, short to ground, outside air temperature sensor, ECM
P0073	Outside air temperature sensor – high input	Wiring, short to positive, outside air temperature sensor, ECM
P0074	Outside air temperature sensor – circuit intermittent	Wiring, poor connection, outside air temperature sensor, ECM
P0075	Intake valve control solenoid, bank 1 – circuit malfunction	Wiring, intake valve control solenoid, ECM
P0076	Intake valve control solenoid, bank 1 – circuit low	Wiring short to ground, intake valve control solenoid, ECM
P0077	Intake valve control solenoid, bank 1 – circuit high	Wiring short to positive, intake valve control solenoid, ECM
P0078	Exhaust valve control solenoid, bank 1 – circuit malfunction	Wiring, exhaust valve control solenoid, ECM
P0079	Exhaust valve control solenoid, bank 1 – circuit low	Wiring short to ground, exhaust valve control solenoid, ECM
P0080	Exhaust valve control solenoid, bank 1 – circuit high	Wiring short to positive, exhaust valve control solenoid, ECM
P0081	Intake valve control solenoid, bank 2 – circuit malfunction	Wiring, intake valve control solenoid, ECM
P0082	Intake valve control solenoid, bank 2 – circuit low	Wiring short to ground, intake valve control solenoid, ECM
P0083	Intake valve control solenoid, bank 2 – circuit high	Wiring short to positive, intake valve control solenoid, ECM
P0084	Exhaust valve control solenoid, bank 2 – circuit malfunction	Wiring, exhaust valve control solenoid, ECM
P0085	Exhaust valve control solenoid, bank 2 – circuit low	Wiring short to ground, exhaust valve control solenoid, ECM
P0086	Exhaust valve control solenoid, bank 2 – circuit high	Wiring short to positive, exhaust valve control solenoid, ECM
P0087	Fuel rail/system pressure – too low	Fuel pump, fuel pressure regulator, fuel supply pipe blockage, mechanical fault
P0088	Fuel rail/system pressure – too high	Fuel pump, fuel pressure regulator, fuel return pipe blockage, mechanical fault
P0089	Fuel pressure regulator – performance problem	Fuel pressure regulator, mechanical fault
P0090	Fuel metering solenoid – open circuit	Wiring open circuit, fuel metering solenoid, ECM
P0091	Fuel metering solenoid – short to ground	Wiring short to ground, fuel metering solenoid, ECM
P0092	Fuel metering solenoid – short to positive	Wiring short to positive, fuel metering solenoid, ECM
P0093	Fuel system leak detected – large leak	Wiring, fuel pressure sensor, mechanical fault
P0094	Fuel system leak detected – small leak	Wiring, fuel pressure sensor, mechanical fault
P0095	Intake air temperature (IAT) sensor 2 – circuit malfunction	Wiring, poor connection, IAT sensor, ECM
P0096	Intake air temperature (IAT) sensor 2 – circuit range/performance	Wiring, poor connection, IAT sensor, ECM

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Trouble code	Fault location	Probable cause
P0097	Intake air temperature (IAT) sensor 2 – circuit low input	Wiring short to ground, IAT sensor, ECM
P0098	Intake air temperature (IAT) sensor 2 – circuit high input	Wiring short to positive, IAT sensor, ECM
P0099	Intake air temperature (IAT) sensor 2 – circuit intermittent/erratic	Wiring, poor connection, IAT sensor, ECM
P0100	Mass air flow (MAF) sensor/volume air flow (VAF) sensor – circuit malfunction	Wiring, MAF/VAF sensor, ECM
P0101	Mass air flow (MAF) sensor/volume air flow (VAF) sensor – range/performance problem	Intake leak/blockage, MAF/VAF sensor
P0102	Mass air flow (MAF) sensor/volume air flow (VAF) sensor – low input	Wiring short to ground, MAF/VAF sensor, ECM
P0103	Mass air flow (MAF) sensor/volume air flow (VAF) sensor – high input	Wiring short to positive, MAF/VAF sensor, ECM
P0104	Mass air flow (MAF) sensor/volume air flow (VAF) sensor – circuit intermittent	Wiring, poor connection, MAF/VAF sensor, ECM
P0105	Manifold abosolute pressure (MAP) sensor/barometric pressure (BARO) sensor – circuit malfunction	Wiring, MAP sensor, BARO sensor, ECM
P0106	Manifold abosolute pressure (MAP) sensor/barometric pressure (BARO) sensor – range/performance problem	Intake/exhaust leak, wiring, MAP sensor, BARO sensor
P0107	Manifold abosolute pressure (MAP) sensor/barometric pressure (BARO) sensor – low input	Wiring short to ground, MAP sensor, BARO sensor, ECM
P0108	Manifold abosolute pressure (MAP) sensor/barometric pressure (BARO) sensor – high input	Wiring short to positive, MAP sensor, BARO sensor, ECM
P0109	Manifold abosolute pressure (MAP) sensor/barometric pressure (BARO) sensor – circuit intermittent	Wiring, poor connection, MAP sensor, BARO sensor, ECM
P0110	Intake air temperature (IAT) sensor – circuit malfunction	Wiring, IAT sensor, ECM
P0111	Intake air temperature (IAT) sensor – range/performance problem	IAT sensor
P0112	Intake air temperature (IAT) sensor – low input	Wiring short to ground, IAT sensor, ECM
P0113	Intake air temperature (IAT) sensor – high input	Wiring open circuit/short to positive, ground wire defective, IAT sensor, ECM
P0114	Intake air temperature (IAT) sensor – circuit intermittent	Wiring, poor connection, IAT sensor, ECM
P0115	Engine coolant temperature (ECT) sensor – circuit malfunction	Wiring, ECT sensor, ECM
P0116	Engine coolant temperature (ECT) sensor – range/performance problem	Coolant thermostat, poor connection, wiring, ECT sensor
P0117	Engine coolant temperature (ECT) sensor – low input	Coolant thermostat, wiring short to ground, ECT sensor
P0118	Engine coolant temperature (ECT) sensor – high input	Coolant thermostat, wiring open circuit/short to positive, ground wire defective, ECT sensor
P0119	Engine coolant temperature (ECT) sensor – circuit intermittent	Wiring, poor connection, ECT sensor, ECM
P0120	Throttle position (TP) sensor A/accelerator pedal position (APP) sensor A – circuit malfunction	Wiring,TP/APP sensor, ECM
	Throttle position (TP) switch A/accelerator pedal position (APP) switch A – circuit malfunction	Wiring,TP/APP switch, ECM
P0121	Throttle position (TP) sensor A/accelerator pedal position (APP) sensor A – range/performance problem	Accelerator cable adjustment, TP/APP sensor
	Throttle position (TP) switch A/accelerator pedal position (APP) switch A – range/performance problem	Accelerator cable adjustment, TP/APP switch
P0122	Throttle position (TP) sensor A/accelerator pedal position (APP) sensor A – low input	Wiring short to ground,TP/APP sensor, ECM
	Throttle position (TP) switch A/accelerator pedal position (APP) switch A – low input	Wiring short to ground,TP/APP switch, ECM
P0123	Throttle position (TP) sensor A/accelerator pedal position (APP) sensor A – high input	Wiring short to positive,TP/APP sensor, ECM
	Throttle position (TP) switch A/accelerator pedal position (APP) switch A – high input	Wiring short to positive,TP/APP switch, ECM
P0124	Throttle position (TP) sensor A/accelerator pedal position (APP) sensor A – circuit intermittent	Wiring, poor connection, TP/APP sensor, ECM
	Throttle position (TP) switch A/accelerator pedal position (APP) switch A – circuit intermittent	Wiring, poor connection, TP/APP switch, ECM
P0125	Insufficient coolant temperature for closed loop fuel control	Wiring, cooling system, coolant thermostat, ECT sensor
P0126	Insufficient coolant temperature for stable operation	Wiring, cooling system, coolant thermostat, ECT sensor

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Trouble code	Fault location	Probable cause
P0127	Intake air temperature – too high	Wiring short to ground, IAT sensor 2, mechanical fault, ECM
P0128	Coolant thermostat – coolant temp below thermostat regulating temperature	Mechanical fault
P0129	Barometric pressure – too low	Wiring, BARO sensor, mechanical fault
P0130	Heated oxygen sensor (HO2S) 1, bank 1 – circuit malfunction	Heating inoperative, poor connection, wiring, HO2S
	Oxygen sensor (O2S) 1, bank 1 – circuit malfunction	Wiring, O2S, ECM
P0131	Heated oxygen sensor (HO2S) 1, bank 1 – low voltage	Exhaust leak, wiring short to ground, HO2S, ECM
	Oxygen sensor (O2S) 1, bank 1 – low voltage	Exhaust leak,wiring short to ground, O2S, ECM
P0132	Heated oxygen sensor (HO2S) 1, bank 1 – high voltage	Wiring short to positive, HO2S, ECM
	Oxygen sensor (O2S) 1, bank 1 – high voltage	Wiring short to positive, O2S, ECM
P0133	Heated oxygen sensor (HO2S) 1, bank 1 – slow response	Heating inoperative, wiring, HO2S
	Oxygen sensor (O2S) 1, bank 1 – slow response	Wiring, O2S
P0134	Heated oxygen sensor (HO2S) 1, bank 1 – no acitivty detected	Wiring open circuit, heating inoperative, HO2S
	Oxygen sensor (O2S) 1, bank 1 – no activity detected	Wiring, O2S
P0135	Heated oxygen sensor (HO2S) 1, bank 1, heater control – circuit malfunction	Fuse, wiring, HO2S, ECM
P0136	Heated oxygen sensor (HO2S) 2, bank 1 – circuit malfunction	Heating inoperative, wiring, HO2S, ECM
	Oxygen sensor (O2S) 2, bank 1 – circuit malfunction	Wiring, O2S, ECM
P0137	Heated oxygen sensor (HO2S) 2, bank 1 – low voltage	Exhaust leak, wiring short to ground, HO2S, ECM
	Oxygen sensor (O2S) 2, bank 1 – low voltage	Exhaust leak,wiring short to ground, O2S, ECM
P0138	Heated oxygen sensor (HO2S) 2, bank 1 – high voltage	Wiring short to positive, HO2S, ECM
	Oxygen sensor (O2S) 2, bank 1 – high voltage	Wiring short to positive, O2S, ECM
P0139	Heated oxygen sensor (HO2S) 2, bank 1 – slow response	Heating inoperative, wiring, HO2S
	Oxygen sensor (O2S) 2, bank 1 – slow response	Wiring, O2S
P0140	Heated oxygen sensor (HO2S) 2, bank 1 – no acitivty detected	Wiring, heating inoperative, HO2S, ECM
	Oxygen sensor (O2S) 2, bank 1 – no activity detected	Wiring, O2S, ECM
P0141	Heated oxygen sensor (HO2S) 2, bank 1, heater control – circuit malfunction	Wiring, HO2S, ECM
P0142	Heated oxygen sensor (HO2S) 3, bank 1 – circuit malfunction	Wiring, HO2S, ECM
P0143	Heated oxygen sensor (HO2S) 3, bank 1 – low voltage	Exhaust leak, wiring short to ground, HO2S, ECM
	Oxygen sensor (O2S) 3, bank 1 – low voltage	Exhaust leak,wiring short to ground, O2S, ECM
P0144	Heated oxygen sensor (HO2S) 3, bank 1 – high voltage	Wiring short to positive, HO2S, ECM
	Oxygen sensor (O2S) 3, bank 1 – high voltage	Wiring short to positive, O2S, ECM
P0145	Heated oxygen sensor (HO2S) 3, bank 1 – slow response	Heating inoperative, wiring, HO2S
	Oxygen sensor (O2S) 3, bank 1 – slow response	Wiring, O2S
P0146	Heated oxygen sensor (HO2S) 3, bank 1 – no acitivty detected	Wiring, HO2S, ECM
	Oxygen sensor (O2S) 3, bank 1 – no activity detected	Wiring, O2S, ECM
P0147	Heated oxygen sensor (HO2S) 3, bank 1, heater control – circuit malfunction	Wiring, HO2S, ECM
P0148	Fuel delivery error	Fuel pump/fuel injection pump

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0149	Fuel timing error	Fuel pump/fuel injection pump
P0150	Heated oxygen sensor (HO2S) 1, bank 2 – circuit malfunction	Wiring, HO2S, ECM
	Oxygen sensor (O2S) 1, bank 2 – circuit malfunction	Wiring, O2S, ECM
P0151	Heated oxygen sensor (HO2S) 1, bank 2 – low voltage	Exhaust leak, wiring short to ground, HO2S, ECM
	Oxygen sensor (O2S) 1, bank 2 – low voltage	Exhaust leak,wiring short to ground, O2S, ECM
P0152	Heated oxygen sensor (HO2S) 1, bank 2 – high voltage	Wiring short to positive, HO2S, ECM
	Oxygen sensor (O2S) 1, bank 2 – high voltage	Wiring short to positive, O2S, ECM
P0153	Heated oxygen sensor (HO2S) 1, bank 2 – slow response	Heating inoperative, wiring, HO2S
	Oxygen sensor (O2S) 1, bank 2 – slow response	Wiring, O2S
P0154	Heated oxygen sensor (HO2S) 1, bank 2 – no acitivty detected	Wiring, HO2S, ECM
	Oxygen sensor (O2S) 1, bank 2 – no activity detected	Wiring, O2S, ECM
P0155	Heated oxygen sensor (HO2S) 1, bank 2, heater control – circuit malfunction	Wiring, HO2S, ECM
P0156	Heated oxygen sensor (HO2S) 2, bank 2 – circuit malfunction	Heating inoperative, wiring, HO2S, ECM
	Oxygen sensor (O2S) 2, bank 2 – circuit malfunction	Wiring, O2S, ECM
P0157	Heated oxygen sensor (HO2S) 2, bank 2 – low voltage	Exhaust leak, wiring short to ground, HO2S, ECM
	Oxygen sensor (O2S) 2, bank 2 – low voltage	Exhaust leak,wiring short to ground, O2S, ECM
P0158	Heated oxygen sensor (HO2S) 2, bank 2 – high voltage	Wiring short to positive, HO2S, ECM
	Oxygen sensor (O2S) 2, bank 2 – high voltage	Wiring short to positive, O2S, ECM
P0159	Heated oxygen sensor (HO2S) 2, bank 2 – slow response	Heating inoperative, wiring, HO2S
	Oxygen sensor (O2S) 2, bank 2 – slow response	Wiring, O2S
P0160	Heated oxygen sensor (HO2S) 2, bank 2 – no acitivty detected	Wiring, HO2S, ECM
	Oxygen sensor (O2S) 2, bank 2 – no activity detected	Wiring, O2S, ECM
P0161	Heated oxygen sensor (HO2S) 2, bank 2, heater control – circuit malfunction	Wiring, HO2S, ECM
P0162	Heated oxygen sensor (HO2S) 3, bank 2 – circuit malfunction	Wiring, HO2S, ECM
	Oxygen sensor (O2S) 3, bank 2 – circuit malfunction	Wiring, O2S, ECM
P0163	Heated oxygen sensor (HO2S) 3, bank 2 – low voltage	Exhaust leak, wiring short to ground, HO2S, ECM
	Oxygen sensor (O2S) 3, bank 2 – low voltage	Exhaust leak, wiring short to ground, O2S, ECM
P0164	Heated oxygen sensor (HO2S) 3, bank 2 – high voltage	Wiring short to positive, HO2S, ECM
	Oxygen sensor (O2S) 3, bank 2 – high voltage	Wiring short to positive, O2S, ECM
P0165	Heated oxygen sensor (HO2S) 3, bank 2 – slow response	Heating inoperative, wiring, HO2S
	Oxygen sensor (O2S) 3, bank 2 – slow response	Wiring, O2S
P0166	Heated oxygen sensor (HO2S) 3, bank 2 – no acitivty detected	Wiring, HO2S, ECM
	Oxygen sensor (O2S) 3, bank 2 – no activity detected	Wiring, O2S, ECM
P0167	Heated oxygen sensor (HO2S) 3, bank 2, heater control – circuit malfunction	Wiring, HO2S, ECM
P0168	Fuel temperature – too high	Wiring, fuel temperature sensor, mechanical fault
P0169	Incorrect fuel composition	Wiring, fuel temperature sensor, mechanical fault

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0170	Fuel trim (FT), bank 1 – malfunction	Intake leak, AIR system, fuel pressure/pump, injector(s), EVAP canister purge valve, HO2S
P0171	System too lean, bank 1	Intake/exhaust leak, AIR system, MAF/VAF sensor, fuel pressure/pump, injector(s), HO2S
P0172	System too rich, bank 1	Intake blocked, EVAP canister purge valve, fuel pressure, EGR system, injector(s), HO2S
P0173	Fuel trim (FT), bank 2 – malfunction	Intake leak, AIR system, fuel pressure/pump, injector(s), EVAP canister purge valve, HO2S
P0174	System too lean, bank 2	Intake/exhaust leak, fuel pressure/pump, injector(s), AIR system, hose connection(s)
P0175	System too rich, bank 2	Intake blocked, EVAP canister purge valve, fuel pressure, EGR system, injector(s), HO2S
P0176	Fuel composition sensor – circuit malfunction	Wiring, fuel composition sensor, ECM
P0177	Fuel composition sensor – range/performance problem	Fuel composition sensor
P0178	Fuel composition sensor – low input	Wiring short to ground, fuel composition sensor, ECM
P0179	Fuel composition sensor – high input	Wiring short to positive, fuel composition sensor, ECM
P0180	Fuel temperature sensor A – circuit malfunction	Wiring, fuel temperature sensor, ECM
P0181	Fuel temperature sensor A – range/performance problem	Fuel temperature sensor
P0182	Fuel temperature sensor A – low input	Wiring short to ground, fuel temperature sensor, ECM
P0183	Fuel temperature sensor A – high input	Wiring short to positive, fuel temperature sensor, ECM
P0184	Fuel temperature sensor A – circuit intermittent	Wiring, poor connection, fuel temperature sensor, ECM
P0185	Fuel temperature sensor B – circuit malfunction	Wiring, fuel temperature sensor, ECM
P0186	Fuel temperature sensor B – range/performance problem	Fuel temperature sensor
P0187	Fuel temperature sensor B – low input	Wiring short to ground, fuel temperature sensor, ECM
P0188	Fuel temperature sensor B – high input	Wiring short to positive, fuel temperature sensor, ECM
P0189	Fuel temperature sensor B – circuit intermittent	Wiring, poor connection, fuel temperature sensor, ECM
P0190	Fuel rail pressure (FRP) sensor – circuit malfunction	Wiring, fuel rail pressure sensor, ECM
P0191	Fuel rail pressure (FRP) sensor – range/performance problem	Wiring, FRP sensor
P0192	Fuel rail pressure (FRP) sensor – low input	Wiring short to ground, FRP sensor
P0193	Fuel rail pressure (FRP) sensor – high input	Wiring short to positive, FRP sensor
P0194	Fuel rail pressure (FRP) sensor – circuit intermittent	Wiring, poor connection, FRP sensor
P0195	Engine oil temperature (EOT) sensor – circuit malfunction	Wiring, EOT sensor, ECM
P0196	Engine oil temperature (EOT) sensor – range/performance problem	EOT sensor
P0197	Engine oil temperature (EOT) sensor – low input	Wiring short to ground, EOT sensor
P0198	Engine oil temperature (EOT)) sensor – high input	Wiring short to positive, EOT sensor
P0199	Engine oil temperature (EOT) sensor – circuit intermittent	Wiring, poor connection, EOT sensor, ECM
P0200	Injector – circuit malfunction	Wiring, injector, ECM
P0201	Injector 1 – circuit malfunction	Wiring, injector, ECM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0202	Injector 2 – circuit malfunction	Wiring, injector, ECM
P0203	Injector 3 – circuit malfunction	Wiring, injector, ECM
P0204	Injector 4 – circuit malfunction	Wiring, injector, ECM
P0205	Injector 5 – circuit malfunction	Wiring, injector, ECM
P0206	Injector 6 – circuit malfunction	Wiring, injector, ECM
P0207	Injector 7 – circuit malfunction	Wiring, injector, ECM
P0208	Injector 8 – circuit malfunction	Wiring, injector, ECM
P0209	Injector 9 – circuit malfunction	Wiring, injector, ECM
P0210	Injector 10 – circuit malfunction	Wiring, injector, ECM
P0211	Injector 11 – circuit malfunction	Wiring, injector, ECM
P0212	Injector 12 – circuit malfunction	Wiring, injector, ECM
P0213	Cold start injector 1 – circuit malfunction	Wiring, cold start injector, ECM
P0214	Cold start injector 2 – circuit malfunction	Wiring, cold start injector, ECM
P0215	Fuel shut-off solenoid – circuit malfunction	Wiring, fuel shut-off solenoid, ECM
P0216	Fuel injection timing control – circuit malfunction	Wiring, fuel injection timing control solenoid, ECM
P0217	Engine over temperature condition	Wiring, cooling system, coolant thermostat, ECT sensor
P0218	Transmission over temperature condition	Wiring, TFT sensor, ECM
P0219	Engine over speed condition	Incorrect gear change
P0220	Throttle position (TP) sensor B/accelerator pedal position (APP) sensor B – circuit malfunction	Wiring, TP/APP sensor, ECM
	Throttle position (TP) switch B/accelerator pedal position (APP) switch B – circuit malfunction	Wiring, TP/APP switch, ECM
P0221	Throttle position (TP) sensor B/accelerator pedal position (APP) sensor B – range/performance problem	Accelerator cable adjustment, TP/APP sensor
	Throttle position (TP) switch B/accelerator pedal position (APP) switch B – range/performance problem	Accelerator cable adjustment, TP/APP switch
P0222	Throttle position (TP) sensor B/accelerator pedal position (APP) sensor B – low input	Wiring short to ground, TP/APP sensor, ECM
	Throttle position (TP) switch B/accelerator pedal position (APP) switch B – low input	Wiring short to ground, TP/APP switch, ECM
P0223	Throttle position (TP) sensor B/accelerator pedal position (APP) sensor B – high input	Wiring short to positive, TP/APP sensor, ECM
	Throttle position (TP) switch B/accelerator pedal position (APP) switch B – high input	Wiring short to positive, TP/APP switch, ECM
P0224	Throttle position (TP) sensor B/accelerator pedal position (APP) sensor B – circuit intermittent	Wiring, poor connection, TP/APP sensor, ECM
	Throttle position (TP) switch B/accelerator pedal position (APP) switch B – circuit intermittent	Wiring, poor connection, TP/APP switch, ECM
P0225	Throttle position (TP) sensor C/accelerator pedal position (APP) sensor C – circuit malfunction	Wiring, TP/APP sensor, ECM
	Throttle position (TP) switch C/accelerator pedal position (APP) switch C – circuit malfunction	Wiring, TP/APP switch, ECM
P0226	Throttle position (TP) sensor C/accelerator pedal position (APP) sensor C – range/performance problem	Accelerator cable adjustment, TP/APP sensor
	Throttle position (TP) switch C/accelerator pedal position (APP) switch C – range/performance problem	Accelerator cable adjustment, TP/APP switch
P0227	Throttle position (TP) sensor C/accelerator pedal position (APP) sensor C – low input	Wiring short to ground, TP/APP sensor, ECM
	Throttle position (TP) switch C/accelerator pedal position (APP) switch C – low input	Wiring short to ground, TP/APP switch, ECM
P0228	Throttle position (TP) sensor C/accelerator pedal position (APP) sensor C – high input	Wiring short to positive, TP/APP sensor, ECM
	Throttle position (TP) switch C/accelerator pedal position (APP) switch C – high input	Wiring short to positive, TP/APP switch, ECM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0229	Throttle position (TP) sensor C/accelerator pedal position (APP) sensor C – circuit intermittent	Wiring, poor connection, TP/APP sensor, ECM
	Throttle position (TP) switch C/accelerator pedal position (APP) switch C – circuit intermittent	Wiring, poor connection, TP/APP switch, ECM
P0230	Fuel pump relay – circuit malfunction	Wiring, fuel pump relay, ECM
P0231	Fuel pump relay – circuit low	Wiring short to ground, fuel pump relay, ECM
P0232	Fuel pump relay – circuit high	Wiring short to positive, fuel pump relay, ECM
P0233	Fuel pump relay – circuit intermittent	Wiring, poor connection, fuel pump relay, ECM
P0234	Engine boost condition – limit exceeded	Hose connection(s), wiring, TC wastergate regulating valve, TC wastegate
P0235	Engine boost condition – limit not reached	Hose connection(s), wiring, TC wastergate regulating valve, TC wastegate, TC
P0236	Manifold absolute pressure (MAP) sensor A, TC system – range/performance problem	Intake/exhaust leak, hose connection(s), MAP sensor
P0237	Manifold absolute pressure (MAP) sensor A, TC system – low input	Wiring short to ground, MAP sensor, ECM
P0238	Manifold absolute pressure (MAP) sensor A, TC system – high input	Wiring short to positive, MAP sensor, ECM
P0239	Manifold absolute pressure (MAP) sensor B, TC system – circuit malfunction	Wiring, MAP sensor, ECM
P0240	Manifold absolute pressure (MAP) sensor B, TC system – range/performance problem	Intake/exhaust leak, hose connection(s), MAP sensor
P0241	Manifold absolute pressure (MAP) sensor B, TC system – low input	Wiring short to ground, MAP sensor, ECM
P0242	Manifold absolute pressure (MAP) sensor B, TC system – high input	Wiring short to positive, MAP sensor, ECM
P0243	Turbocharger (TC) wastegate regulating valve A – circuit malfunction	Wiring, TC wastegate regulating valve, ECM
P0244	Turbocharger (TC) wastegate regulating valve A – range/performance problem	TC wastegate regulating valve
P0245	Turbocharger (TC) wastegate regulating valve A – circuit low	Wiring short to ground, TC wastegate regulating valve, ECM
P0246	Turbocharger (TC) wastegate regulating valve A – circuit high	Wiring short to positive, TC wastegate regulating valve, ECM
P0247	Turbocharger (TC) wastegate regulating valve B – circuit malfunction	Wiring, TC wastegate regulating valve, ECM
P0248	Turbocharger (TC) wastegate regulating valve B – range/performance problem	TC wastegate regulating valve
P0249	Turbocharger (TC) wastegate regulating valve B – circuit low	Wiring short to ground, TC wastegate regulating valve, ECM
P0250	Turbocharger (TC) wastegate regulating valve B – circuit high	Wiring short to positive, TC wastegate regulating valve, ECM
P0251	Injection pump A, rotor/cam – circuit malfunction	Wiring, injection pump, ECM
P0252	Injection pump A, rotor/cam – range/performance problem	Injection pump
P0253	Injection pump A, rotor/cam – circuit low	Wiring short to ground, injection pump, ECM
P0254	Injection pump A, rotor/cam – circuit high	Wiring short to positive, injection pump, ECM
P0255	Injection pump A, rotor/cam – circuit intermittent	Wiring, poor connection, injection pump, ECM
P0256	Injection pump B, rotor/cam – circuit malfunction	Wiring, injection pump, ECM
P0257	Injection pump B, rotor/cam – range/performance problem	Injection pump
P0258	Injection pump B, rotor/cam – circuit low	Wiring short to ground, injection pump, ECM
P0259	Injection pump B, rotor/cam – circuit high	Wiring short to positive, injection pump, ECM
P0260	Injection pump B, rotor/cam – circuit intermittent	Wiring, poor connection, injection pump, ECM
P0261	Injector 1 – circuit low	Wiring short to ground, injector, ECM
P0262	Injector 1 – circuit high	Wiring short to positive, injector, ECM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0263	Cylinder 1 – contribution/balance fault	Wiring, fuel system, ECM
P0264	Injector 2 – circuit low	Wiring short to ground, injector, ECM
P0265	Injector 2 – circuit high	Wiring short to positive, injector, ECM
P0266	Cylinder 2 – contribution/balance fault	Wiring, fuel system, ECM
P0267	Injector 3 – circuit low	Wiring short to ground, injector, ECM
P0268	Injector 3 – circuit high	Wiring short to positive, injector, ECM
P0269	Cylinder 3 – contribution/balance fault	Wiring, fuel system, ECM
P0270	Injector 4 – circuit low	Wiring short to ground, injector, ECM
P0271	Injector 4 – circuit high	Wiring short to positive, injector, ECM
P0272	Cylinder 4 – contribution/balance fault	Wiring, fuel system, ECM
P0273	Injector 5 – circuit low	Wiring short to ground, injector, ECM
P0274	Injector 5 – circuit high	Wiring short to positive, injector, ECM
P0275	Cylinder 5 – contribution/balance fault	Wiring, fuel system, ECM
P0276	Injector 6 – circuit low	Wiring short to ground, injector, ECM
P0277	Injector 6 – circuit high	Wiring short to positive, injector, ECM
P0278	Cylinder 6 – contribution/balance fault	Wiring, fuel system, ECM
P0279	Injector 7 – circuit low	Wiring short to ground, injector, ECM
P0280	Injector 7 – circuit high	Wiring short to positive, injector, ECM
P0281	Cylinder 7 – contribution/balance fault	Wiring, fuel system, ECM
P0282	Injector 8 – circuit low	Wiring short to ground, injector, ECM
P0283	Injector 8 – circuit high	Wiring short to positive, injector, ECM
P0284	Cylinder 8 – contribution/balance fault	Wiring, fuel system, ECM
P0285	Injector 9 – circuit low	Wiring short to ground, injector, ECM
P0286	Injector 9 – circuit high	Wiring short to positive, injector, ECM
P0287	Cylinder 9 – contribution/balance fault	Wiring, fuel system, ECM
P0288	Injector 10 – circuit low	Wiring short to ground, injector, ECM
P0289	Injector 10 – circuit high	Wiring short to positive, injector, ECM
P0290	Cylinder 10 – contribution/balance fault	Wiring, fuel system, ECM
P0291	Injector 11 – circuit low	Wiring short to ground, injector, ECM
P0292	Injector 11 – circuit high	Wiring short to positive, injector, ECM
P0293	Cylinder 11 – contribution/balance fault	Wiring, fuel system, ECM
P0294	Injector 12 – circuit low	Wiring short to ground, injector, ECM
P0295	Injector 12 – circuit high	Wiring short to positive, injector, ECM
P0296	Cylinder 12 – contribution/balance fault	Wiring, fuel system, ECM
P0297	Vehicle over-speed condition	Wiring, VSS, mechanical fault
P0298	Engine oil temperature – too high	Wiring, EOT sensor, mechanical fault

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0299	Turbo/super charger – low boost	Mechanical fault
P0300	Random/multiple cylinder(s) – misfire detected	Spark plug(s), HT lead(s), injector(s), ignition coil(s), low compression, wiring
P0301	Cylinder 1 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0302	Cylinder 2 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0303	Cylinder 3 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0304	Cylinder 4 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0305	Cylinder 5 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0306	Cylinder 6 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0307	Cylinder 7 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0308	Cylinder 8 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0309	Cylinder 9 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0310	Cylinder 10 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0311	Cylinder 11 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0312	Cylinder 12 – misfire detected	Engine mechanical fault, wiring, ignitiion/fuel system, injector, ECT/MAF sensor, ECM
P0313	Misfire detected – low fuel level	Fuel system, mechanical fault
P0314	Single cylinder misfire – cylinder not specified	Engine mechanical fault, wiring, ignition/fuel system, injector
P0315	Crankshaft position system – variation not learned	Engine mechanical fault, wiring
P0316	Misfire dectected during startup – first 1000 revolutions	Engine mechanical fault, wiring, ignition/fuel system, injector
P0317	Rough road hardware not present	Wiring, ECM
P0318	Rough road sensor signal A – circuit malfunction	Wiring, rough road sensor A, mechanical fault
P0319	Rough road sensor signal B – circuit malfunction	Wiring, rough road sensor B, mechanical fault
P0320	Crankshaft position (CKP) sensor/engine speed (RPM) sensor – circuit malfunction	WiringCKP/RPM sensor, ECM
P0321	Crankshaft position (CKP) sensor/engine speed (RPM) sensor – range/performance problem	Air gap, metal particle contamination, insecure sensor/rotor, wiring, CKP/RPM sensor
P0322	Crankshaft position (CKP) sensor/engine speed (RPM) sensor – no signal	Wiring, CKP/RPM sensor, ECM
P0323	Crankshaft position (CKP) sensor/engine speed (RPM) sensor – circuit intermittent	Wiring, poor connection, CKP/RPM sensor, ECM
P0324	Knock control system error	Wiring, poor connection, KS, ECM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0325	Knock sensor (KS) 1, bank 1 – circuit malfunction	Wiring, poor connection, KS
P0326	Knock sensor (KS) 1, bank 1 – range/performance problem	Wiring, KS incorrectly tightened, KS
P0327	Knock sensor (KS) 1, bank 1 – low input	Insecure KS, poor connection, wiring short to ground, incorrectly tightened, KS, ECM
P0328	Knock sensor (KS) 1, bank 1 – high input	Wiring short to positive, KS incorrectly tightened, KS, ECM
P0329	Knock sensor (KS) 1, bank 1 – circuit intermittent	Wiring, poor connection, KS, ECM
P0330	Knock sensor (KS) 2, bank 2 – circuit malfunction	Wiring, KS, ECM
P0331	Knock sensor (KS) 2, bank 2 – range/performance problem	Wiring, KS incorrectly tightened, KS
P0332	Knock sensor (KS) 2, bank 2 – low input	Insecure KS, poor connection, wiring short to ground, incorrectly tightened, KS, ECM
P0333	Knock sensor (KS) 2, bank 2 – high input	Wiring short to positive, KS incorrectly tightened, KS, ECM
P0334	Knock sensor (KS) 2, bank 2 – circuit intermittent	Wiring, poor connection, KS, ECM
P0335	Crankshaft position (CKP) sensor – circuit malfunction	Wiring, CKP sensor, ECM
P0336	Crankshaft position (CKP) sensor – range/performance problem	Insecure sensor/rotor, air gap, wiring, CKP sensor
P0337	Crankshaft position (CKP) sensor – low input	Wiring short to ground, CKP sensor, ECM
P0338	Crankshaft position (CKP) sensor – high input	Wiring short to positive, CKP sensor, ECM
P0339	Crankshaft position (CKP) sensor– circuit intermittent	Wiring, poor connection, CKP sensor, ECM
P0340	Camshaft position (CMP) sensor A, bank 1 – circuit malfunction	Wiring, CMP sensor, ECM
P0341	Camshaft position (CMP) sensor A, bank 1 – range/performance problem	Insecure sensor/rotor, air gap, wiring, CMP sensor
P0342	Camshaft position (CMP) sensor A, bank 1 – low input	Wiring short to ground, CMP sensor, ECM
P0343	Camshaft position (CMP) sensor A, bank 1 – high input	Wiring short to positive, CMP sensor, ECM
P0344	Camshaft position (CMP) sensor A, bank 1– circuit intermittent	Wiring, poor connection, CMP sensor, ECM
P0345	Camshaft position (CMP) sensor A, bank 2 – circuit malfunction	Wiring, CMP sensor, ECM
P0346	Camshaft position (CMP) sensor A, bank 2 – range/performance problem	Insecure sensor/rotor, air gap, wiring, CMP sensor
P0347	Camshaft position (CMP) sensor A, bank 2 – low input	Wiring short to ground, CMP sensor, ECM
P0348	Camshaft position (CMP) sensor A, bank 2 – high input	Wiring short to positive, CMP sensor, ECM
P0349	Camshaft position (CMP) sensor A, bank 2– circuit intermittent	Wiring, poor connection, CMP sensor, ECM
P0350	Ignitiion coil, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0351	Ignitiion coil A, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0352	Ignitiion coil B, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0353	Ignitiion coil C, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0354	Ignitiion coil D, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0355	Ignitiion coil E, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0356	Ignitiion coil F, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0357	Ignitiion coil G, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0358	Ignitiion coil H, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0359	Ignitiion coil I, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0360	Ignitiion coil J, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0361	Ignitiion coil K, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0362	Ignitiion coil L, primary/secordary – circuit malfunction	Wiring, ignition coil, ECM
P0363	Misfire detected – fueling disabled	Fuel system, mechanical fault
P0365	Camshaft position (CMP) sensor B, bank 1 – circuit malfunction	Wiring, poor connection, CMP sensor, ECM
P0366	Camshaft position (CMP) sensor B, bank 1 – range/performance problem	Wiring, poor connection, CMP sensor
P0367	Camshaft position (CMP) sensor B, bank 1 – low input	Wiring short to ground, CMP sensor, ECM
P0368	Camshaft position (CMP) sensor B, bank 1 – high input	Wiring short to positive, CMP sensor, ECM
P0369	Camshaft position (CMP) sensor B, bank 1– circuit intermittent	Wiring, poor connection, ECM
P0370	Timing reference, high resolution signal A – malfunction	Wiring, CKP/RPM/CMP sensor, ECM
P0371	Timing reference, high resolution signal A – too many pulses	Wiring, CKP/RPM/CMP sensor, ECM
P0372	Timing reference, high resolution signal A – too few pulses	Wiring, CKP/RPM/CMP sensor, ECM
P0373	Timing reference, high resolution signal A – intermittent erratic pulses	Wiring, poor connection, CKP/RPM/CMP sensor, ECM
P0374	Timing reference, high resolution signal A – no pulses	Wiring, CKP/RPM/CMP sensor, ECM
P0375	Timing reference, high resolution signal B – malfunction	Wiring, CKP/RPM/CMP sensor, ECM
P0376	Timing reference, high resolution signal B – too many pulses	Wiring, CKP/RPM/CMP sensor, ECM
P0377	Timing reference, high resolution signal B – too few pulses	Wiring, CKP/RPM/CMP sensor, ECM
P0378	Timing reference, high resolution signal B – intermittent erratic pulses	Wiring, poor connection, CKP/RPM/CMP sensor, ECM
P0379	Timing reference, high resolution signal B – no pulses	Wiring, CKP/RPM/CMP sensor, ECM
P0380	Glow plugs, circuit A – malfunction	Wiring, glow plug relay, fuse, glow plugs, ECM
P0381	Glow plug warning lamp – circuit malfunction	Wiring, glow plug warning lamp, ECM
P0382	Glow plugs, circuit B – malfunction	Wiring, glow plug relay, fuse, glow plugs, ECM
P0385	Crankshaft position (CKP) sensor B – circuit malfunction	Wiring, CKP sensor, ECM
P0386	Crankshaft position (CKP) sensor B – range/performance problem	Insecure sensor/rotor, air gap, wiring, CKP sensor
P0387	Crankshaft position (CKP) sensor B – low input	Wiring short to ground, CKP sensor, ECM
P0388	Crankshaft position (CKP) sensor B – high input	Wiring short to positive, CKP sensor, ECM
P0389	Crankshaft position (CKP) sensor B – circuit intermittent	Wiring, poor connection, CKP sensor, ECM
P0390	Camshaft position (CMP) sensor B, bank 2 – circuit malfunction	Wiring, poor connection, CMP sensor, ECM
P0391	Camshaft position (CMP) sensor B, bank 2 – circuit range/performance problem	Wiring, poor connection, CMP sensor
P0392	Camshaft position (CMP) sensor B, bank 2 – circuit low input	Wiring short to ground, CMP sensor, ECM
P0393	Camshaft position (CMP) sensor B, bank 2 – circuit high input	Wiring short to positive, CMP sensor, ECM
P0394	Camshaft position (CMP) sensor B, bank 2– circuit intermittent	Wiring, poor connection, ECM
P0400	Exhaust gas recirculation (ERG) system – flow malfunction	Hose leak/blockage, basic setting not carried out (if applicable), wiring, EGR valve, EGR solenoid, ECM
P0401	Exhaust gas recirculation (ERG) system – insufficient flow detected	Hose leak/blockage, basic setting not carried out (if applicable), wiring, EGR valve, EGR solenoid, ECM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0402	Exhaust gas recirculation (ERG) system – excessive flow detected	Hose leak/blockage, basic setting not carried out (if applicable), wiring, EGR valve, EGR solenoid, ECM
P0403	Exhaust gas recirculation (ERG) system – circuit malfunction	Wiring, EGR solenoid, ECM
P0404	Exhaust gas recirculation (ERG) system – range/performance problem	Hose leak/blockage, wiring, EGR valve/solenoid
P0405	Exhaust gas recirculation (ERG) valve position sensor A – low input	Wiring short to ground, EGR valve position sensor, ECM
P0406	Exhaust gas recirculation (ERG) valve position sensor A – high input	Wiring short to positive, EGR valve position sensor, ECM
P0407	Exhaust gas recirculation (ERG) valve position sensor B – low input	Wiring short to ground, EGR valve position sensor, ECM
P0408	Exhaust gas recirculation (ERG) valve position sensor B – high input	Wiring short to positive, EGR valve position sensor, ECM
P0409	Exhaust gas recirculation (ERG) sensor A – circuit malfunction	Wiring, poor connection, EGR sensor, ECM
P0410	Secondary air injection (AIR) system – malfunction	Wiring, AIR valve, AIR solenoid, ECM
P0411	Secondary air injection (AIR) system – incorrect flow detected	AIR pump, AIR valve, AIR hose(s)
P0412	Secondary air injection (AIR) solenoid A – circuit malfunction	Wiring, AIR solenoid, ECM
P0413	Secondary air injection (AIR) solenoid A – open circuit	Wiring open circuit, AIR solenoid, ECM
P0414	Secondary air injection (AIR) solenoid A – short circuit	Wiring short circuit, AIR solenoid, ECM
P0415	Secondary air injection (AIR) solenoid B – circuit malfunction	Wiring, AIR solenoid, ECM
P0416	Secondary air injection (AIR) solenoid B – open circuit	Wiring open circuit, AIR solenoid, ECM
P0417	Secondary air injection (AIR) solenoid B – short circuit	Wiring short circuit, AIR solenoid, ECM
P0418	Secondary air injection (AIR) pump relay A – circuit malfunction	Wiring, AIR pump relay, ECM
P0419	Secondary air injection (AIR) pump relay B – circuit malfunction	Wiring, AIR pump relay, ECM
P0420	Catalytic converter system, bank 1 – efficiency below threshold	Catalytic converter, wiring, HO2S 2
P0421	Warm up catalytic converter, bank 1 – efficiency below threshold	Catalytic converter, wiring, HO2S 2
P0422	Main catalytic converter, bank 1 – efficiency below threshold	Catalytic converter, wiring, HO2S 2
P0423	Heated catalytic converter, bank 1 – efficiency below threshold	Catalytic converter, wiring, HO2S 2
P0424	Heated catalytic converter, bank 1 – temperature below threshold	Catalytic converter, wiring, HO2S 2
P0425	Catalytic converter temperature sensor, bank 1	Wiring, poor connection, catalytic converter temperature sensor, ECM
P0426	Catalytic converter temperature sensor, bank 1 – range/performance	Wiring, poor connection, catalytic converter temperature sensor, ECM
P0427	Catalytic converter temperature sensor, bank 1 – low input	Wiring short to ground, catalytic converter temperature sensor, ECM
P0428	Catalytic converter temperature sensor, bank 1 – high input	Wiring short to positive, catalytic converter temperature sensor, ECM
P0429	Catalytic converter heater, bank 1 – control circuit malfunction	Wiring, relay, ECM
P0430	Catalytic converter system, bank 2 – efficiency below threshold	Catalytic converter, wiring, HO2S 2
P0431	Warm up catalytic converter, bank 2 – efficiency below threshold	Catalytic converter, wiring, HO2S 2
P0432	Main catalytic converter, bank 2 – efficiency below threshold	Catalytic converter, wiring, HO2S 2
P0433	Heated catalytic converter, bank 2 – efficiency below threshold	Catalytic converter, wiring, HO2S 2
P0434	Heated catalytic converter, bank 2 – temperature below threshold	Catalytic converter, wiring, HO2S 2
P0435	Catalytic converter temperature sensor, bank 2	Wiring, poor connection, catalytic converter temperature sensor, ECM
P0436	Catalytic converter temperature sensor, bank 2 – range/performance	Wiring, poor connection, catalytic converter temperature sensor, ECM

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Trouble code	Fault location	Probable cause
P0437	Catalytic converter temperature sensor, bank 2 – low input	Wiring short to ground, catalytic converter temperature sensor, ECM
P0438	Catalytic converter temperature sensor, bank 2 – high input	Wiring short to positive, catalytic converter temperature sensor, ECM
P0439	Catalytic converter heater, bank 2 – control circuit malfunction	Wiring, relay, ECM
P0440	Evaporative emission (EVAP) system – malfunction	Hose connection(s), intake leak, EVAP canister purge valve
P0441	Evaporative emission (EVAP) system – incorrect flow detected	Hose connection(s), intake leak, EVAP canister purge valve
P0442	Evaporative emission (EVAP) system – small leak detected	Hose connection(s), intake leak, EVAP canister, EVAP canister purge valve
P0443	Evaporative emission (EVAP) canister purge valve – circuit malfunction	Wiring, EVAP canister purge valve, ECM
P0444	Evaporative emission (EVAP) canister purge valve – open circuit	Wiring open circuit, EVAP canister purge valve, ECM
P0445	Evaporative emission (EVAP) canister purge valve – short circuit	Wiring short circuit, EVAP canister purge valve, ECM
P0446	Evaporative emission (EVAP) system, vent control – circuit malfunction	Wiring, EVAP canister purge valve, ECM
P0447	Evaporative emission (EVAP) system, vent control – open circuit	Wiring open circuit, EVAP canister purge valve, ECM
P0448	Evaporative emission (EVAP) system, vent control – short circuit	Wiring short circuit, EVAP canister purge valve, ECM
P0449	Evaporative emission (EVAP) system, vent valve – circuit malfunction	Wiring, EVAP canister purge valve, ECM
P0450	Evaporative emission (EVAP) pressure sensor – circuit malfunction	Wiring, EVAP pressure sensor, ECM
P0451	Evaporative emission (EVAP) pressure sensor – range/performance problem	EVAP pressure sensor
P0452	Evaporative emission (EVAP) pressure sensor – low input	Wiring short to ground, EVAP pressure sensor, ECM
P0453	Evaporative emission (EVAP) pressure sensor – high input	Wiring short to positive, EVAP pressure sensor, ECM
P0454	Evaporative emission (EVAP) pressure sensor – circuit intermittent	Wiring, poor connection, EVAP pressure sensor, ECM
P0455	Evaporative emission (EVAP) system – large leak detected	Hose connection(s), intake leak, EVAP canister, EVAP canister purge valve
P0456	Evaporative emission system – very small leak detected	Mechanical fault, hose connection(s), EVAP pressure sensor
P0457	Evaporative emission system – leak detected (fuel cap loose/off)	Mechanical fault, hose connection(s), EVAP pressure sensor
P0458	Evaporative emission system, purge control valve – circuit low	Wiring short to ground, EVAP valve
P0459	Evaporative emission system, purge control valve – circuit high	Wiring short to positive, EVAP valve
P0460	Fuel tank level sensor – circuit malfunction	Wiring, fuel tank level sensor, ECM
P0461	Fuel tank level sensor – range/performance problem	Wiring, fuel tank level sensor
P0462	Fuel tank level sensor – low input	Wiring short to ground, fuel tank level sensor, ECM
P0463	Fuel tank level sensor – high input	Wiring short to positive, fuel tank level sensor, ECM
P0464	Fuel tank level sensor – circuit intermittent	Wiring, poor connection, fuel tank level sensor, ECM
P0465	Evaporative emission (EVAP) canister purge flow sensor – circuit malfunction	Wiring, EVAP canister purge flow sensor, ECM
P0466	Evaporative emission (EVAP) canister purge flow sensor – range/performance problem	EVAP canister purge flow sensor
P0467	Evaporative emission (EVAP) canister purge flow sensor – low input	Wiring short to ground, EVAP canister purge flow sensor, ECM
P0468	Evaporative emission (EVAP) canister purge flow sensor – high input	Wiring short to positive, EVAP canister purge flow sensor, ECM
P0469	Evaporative emission (EVAP) canister purge flow sensor – circuit intermittent	Wiring, poor connection, EVAP canister purge flow sensor, ECM
P0470	Exhaust gas pressure sensor – circuit malfunction	Wiring, exhaust gas pressure sensor, ECM

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Trouble code	Fault location	Probable cause
P0471	Exhaust gas pressure sensor – range/performance problem	Exhaust gas pressure sensor
P0472	Exhaust gas pressure sensor – low input	Wiring short to ground, exhaust gas pressure sensor, ECM
P0473	Exhaust gas pressure sensor – high input	Wiring short to positive, exhaust gas pressure sensor, ECM
P0474	Exhaust gas pressure sensor – circuit intermittent	Wiring, poor connection, exhaust gas pressure sensor, ECM
P0475	Exhaust gas pressure control valve – circuit malfunction	Wiring, exhaust gas pressure control valve, ECM
P0476	Exhaust gas pressure control valve – range/performance problem	Exhaust gas control valve sensor
P0477	Exhaust gas pressure control valve – low input	Wiring short to ground, exhaust gas control valve sensor, ECM
P0478	Exhaust gas pressure control valve – high input	Wiring short to positive, exhaust gas control valve sensor, ECM
P0479	Exhaust gas pressure control valve – circuit intermittent	Wiring, poor connection, exhaust gas control valve sensor, ECM
P0480	Engine coolant blower motor 1 – circuit malfunction	Wiring, engine coolant blower motor, ECM
P0481	Engine coolant blower motor 2 – circuit malfunction	Wiring, engine coolant blower motor, ECM
P0482	Engine coolant blower motor 3 – circuit malfunction	Wiring, engine coolant blower motor, ECM
P0483	Engine coolant blower motor, rationality check – malfunction	Wiring, engine coolant blower motor, ECM
P0484	Engine coolant blower motor – circuit over current	Wiring, engine coolant blower motor, ECM
P0485	Engine coolant blower motor, power/earth – circuit malfunction	Wiring, engine coolant blower motor, ECM
P0486	Exhaust gas recirculation (EGR) valve poistion sensor B – circuit malfunction	Wiring, poor connection, EGR valve position sensor, ECM
P0487	Exhaust gas recirculation (EGR) system, throttle position control – circuit malfunction	Wiring, poor connection, ECM
P0488	Exhaust gas recirculation (EGR) system, throttle position control – range/performance	Wiring, poor connection, ECM
P0489	Exhaust gas recirculation (EGR) system – circuit low	Wiring short to ground, EGR valve
P0490	Exhaust gas recirculation (EGR) system – circuit high	Wiring short to posistive, EGR valve
P0491	Secondary air injection system, bank 1 – malfunction	Wiring, AIR solenoid, hose connections, mechanical fault
P0492	Secondary air injection system, bank 2 – malfunction	Wiring, AIR solenoid, hose connections, mechanical fault
P0493	Fan over-speed (clutch locked)	Fan clutch, mechanical fault
P0494	Fan speed – low	Wiring, relay, fan motor, mechanical fault
P0495	Fan speed – high	Wiring, relay, fan motor, mechanical fault
P0496	Evaporative emission system – high purge flow	Wiring, EVAP valve, mechanical fault
P0497	Evaporative emission system – low purge flow	Wiring, EVAP valve, hoses blocked, mechanical fault
P0498	Evaporative emission system, vent control – circuit low	Wiring, short to gound, EVAP valve
P0499	Evaporative emission system, vent control – circuit high	Wiring, short to positive, EVAP valve
P0500	Vehicle speed sensor (VSS) – circuit malfunction	Wiring, VSS, ECM
P0501	Vehicle speed sensor (VSS) – range/performance problem	Wiring, speedometer, VSS, CAN data bus
P0502	Vehicle speed sensor (VSS) – low input	Wiring short to ground, VSS, ECM
P0503	Vehicle speed sensor (VSS) – intermittent/erratic/high input	Wiring, poor connection, other connected system, insturment panel, VSS
P0504	Brake switch – A/B correlation	Wiring, mechanical fault
P0505	Idle speed control (ISC) system – malfunction	Wiring, ISC acutator/IAC valve, throttle motor, throttle valve tight/sticking, ECM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0506	Idle speed control (ISC) system – rpm lower than expected	Wiring, ISC acutator/IAC valve, throttle motor, throttle valve tight//sticking, ECM
P0507	Idle speed control (ISC) system – rpm higher than expected	Wiring, ISC acutator/IAC valve, throttle motor, throttle valve tight//sticking, ECM
P0508	Idle air control (IAC) system – circuit low	Wiring short to ground, IAC valve, ECM
P0509	Idle air control (IAC) system – circuit high	Wiring short to positive, IAC valve, ECM
P0510	Closed throttle position (CTP) switch – circuit malfunction	Wiring, CTP switch, ECM
P0511	Idle air control (IAC) system – circuit malfunction	Wiring, poor connection, IAC valve, ECM
P0512	Starter request circuit – malfunction	Wiring, immobilizer system, relay
P0513	Incorrect immobilizer key	Immobilizer system
P0514	Battery temperature sensor – circuit range/performance	Wiring, poor connection, battery temperature sensor
P0515	Battery temperature sensor – circuit malfunction	Wiring, poor connection, battery temperature sensor
P0516	Battery temperature sensor – circuit low	Wiring, short to ground, battery temperature sensor, ECM
P0517	Battery temperature sensor – circuit high	Wiring, short to positive, battery temperature sensor, ECM
P0518	Idle air control (IAC) system – circuit intermittent	Wiring, poor connection, IAC valve, ECM
P0519	Idle air control (IAC) system – circuit performance	Wiring, poor connection, IAC valve, ECM
P0520	Engine oil pressure sensor/switch – circuit malfunction	Wiring, engine oil pressure sensor/switch, ECM
P0521	Engine oil pressure sensor/switch – range/performance problem	Engine oil pressure sensor/switch
P0522	Engine oil pressure sensor/switch – low voltage	Wiring short to ground, engine oil pressure sensor/switch, ECM
P0523	Engine oil pressure sensor/switch – high voltage	Wiring short to positive, engine oil pressure sensor/switch, ECM
P0524	Engine oil pressure too low	Mechanical fault
P0525	Cruise control, servo control – circuit range/performance	Wiring, poor connection, cruise control servo
P0526	Fan speed sensor – circuit malfunction	Wiring, poor connection, fan speed sensor, ECM
P0527	Fan speed sensor – circuit range/performance	Wiring, poor connection, fan speed sensor
P0528	Fan speed sensor – no signal	Wiring, poor connection, fan speed sensor, ECM
P0529	Fan speed sensor – circuit intermittent	Wiring, poor connection, ECM
P0530	AC refrigerant pressure sensor – circuit malfunction	Wiring, AC refrigerant pressure sensor, ECM
P0531	AC refrigerant pressure sensor – range/performance problem	AC refrigerant pressure sensor
P0532	AC refrigerant pressure sensor – low input	AC refrigerant pressure too low (incorrectly charged), wiring, AC refrigerant pressure sensor, ECM
P0533	AC refrigerant pressure sensor – high input	AC refrigerant pressure too high (cooling fault/incorrectly charged), wiring, AC refrigerant pressure sensor, ECM
P0534	AC refrigerant charge loss	AC leak, wiring, AC refrigerant pressure sensor
P0535	AC evaporator temperature sensor – circuit malfunction	Wiring, poor connection, A/C evaporator temperature sensor, ECM
P0536	AC evaporator temperature sensor – range/performance problem	Wiring, poor connection, A/C evaporator temperature sensor, ECM
P0537	AC evaporator temperature sensor – circuit low	Wiring, short to gound, A/C evaporator temperature sensor, ECM
P0538	AC evaporator temperature sensor – circuit high	Wiring, short to positive, A/C evaporator temperature sensor, ECM

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Trouble code	Fault location	Probable cause
P0539	AC evaporator temperature sensor – circuit intermittent	Wiring, poor connection, A/C evaporator temperature sensor, ECM
P0540	Intake air heater A – circuit malmunction	Wiring, relay, intake air heater
P0541	Intake air heater A – circuit low	Wiring short to ground, intake air heater
P0542	Intake air heater A – circuit high	Wiring short to positive, intake air heater
P0543	Intake air heater A – circuit open	Wiring, intake air heater
P0544	Exhaust gas recirculation temperature (EGRT) sensor, bank 1 – circuit malfunction	Wiring, EGRT sensor, ECM
P0545	Exhaust gas recirculation temperature (EGRT) sensor, bank 1 – low input	Wiring short to ground, EGRT sensor, ECM
P0546	Exhaust gas recirculation temperature (EGRT) sensor, bank 1 – high input	Wiring short to positive, EGRT sensor, ECM
P0547	Exhaust gas temperature sensor, bank 2 sensor 1 – circuit malfunction	Wiring, poor connection, exhaust gas temperature sensor, ECM
P0548	Exhaust gas temperature sensor, bank 2 sensor 1 – circuit low	Wiring short to ground, exhaust gas temperature sensor, ECM
P0549	Exhaust gas temperature sensor, bank 2 sensor 1 – circuit high	Wiring short to positive, exhaust gas temperature sensor, ECM
P0550	Power steering pressure (PSP) sensor/switch – circuit malfunction	Wiring, PSP sensor/switch, ECM
P0551	Power steering pressure (PSP) sensor/switch – range/performance problem	PAS system, PSP sensor/switch
P0552	Power steering pressure (PSP) sensor/switch – low input	Wiring short to ground, PSP sensor/switch, ECM
P0553	Power steering pressure (PSP) sensor/switch – high input	Wiring short to positive, PSP sensor/switch, ECM
P0554	Power steering pressure (PSP) sensor/switch – circuit intermittent	Wiring, poor connection, PSP sensor/switch, ECM
P0555	Brake booster pressure sensor – circuit malfunction	Wiring, poor connection, brake booster pressure sensor, ECM
P0556	Brake booster pressure sensor – circuit range/performance	Wiring, poor connection, brake booster pressure sensor, ECM
P0557	Brake booster pressure sensor – circuit low input	Wiring short to ground, brake booster pressure sensor, ECM
P0558	Brake booster pressure sensor – circuit high input	Wiring short to positive, brake booster pressure sensor, ECM
P0559	Brake booster pressure sensor – circuit intermittent	Wiring, poor connection, brake booster pressure sensor, ECM
P0560	System voltage – malfunction	Wiring, poor connection, battery, alternator
P0561	System voltage – unstable	Wiring, poor connection, battery, alternator
P0562	System voltage – low	Wiring, poor connection, battery, alternator
P0563	System voltage – high	Alternator
P0564	Cruise control system, multi-function input A – circuit malfunction	Wiring poor connection, multi-function switch, mechanical fault
P0565	Cruise control master switch, ON signal – malfunction	Wiring, cruise control master switch, ECM
P0566	Cruise control master switch, OFF signal – malfunction	Wiring, cruise control master switch, ECM
P0567	Cruise control master switch, RESUME signal – malfunction	Wiring, cruise control master switch, ECM
P0568	Cruise control master switch, SET signal – malfunction	Wiring, cruise control master switch, ECM
P0569	Cruise control master switch, COAST signal – malfunction	Wiring, cruise control master switch, ECM
P0570	Cruise control system, APP sensor signal – malfunction	Wiring, APP sensor, ECM
P0571	Cruise/brake switch A – circuit malfunction	Wiring, cruise/brake switch, ECM
P0572	Cruise/brake switch A – circuit low	Wiring short to ground, cruise/brake switch, ECM
P0573	Cruise/brake switch A – circuit high	Wiring short to positive, cruise/brake switch, ECM
P0574	Cruise control system –vehicle speed too high	Mechanical fault

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0575	Cruise control system – input circuit malfunction	Wiring, poor connection, mechanical fault, ECM
P0576	Cruise control system – input circuit low	Wiring short to ground
P0577	Cruise control system – input circuit high	Wiring short to positive
P0578	Cruise control system, multi-function input A – circuit stuck	Wiring, poor connection, multi-function switch, mechanical fault
P0579	Cruise control system, multi-function input A – circuit range/performance	Wiring, poor connection, multi-function switch, mechanical fault
P0580	Cruise control system, multi-function input A – circuit low	Wiring short to ground, multi-function switch, mechanical fault
P0581	Cruise control system, multi-function input A – circuit high	Wiring short to positive, multi-function switch, mechanical fault
P0582	Cruise control system, vacuum control – circuit open	Wiring, vacuum control solenoid
P0583	Cruise control system, vacuum control – circuit low	Wiring short to ground, vacuum control solenoid
P0584	Cruise control system, vacuum control – circuit high	Wiring short to positive, vacuum control solenoid
P0585	Cruise control system, multi-function input A/B – correlation	Mechanical fault
P0586	Cruise control system, vent control – circuit open	Wiring, vent control solenoid
P0587	Cruise control system, vent control – circuit low	Wiring short to ground, vent control solenoid
P0588	Cruise control system, vent control – circuit high	Wiring short to positive, vent control solenoid
P0589	Cruise control system, multi-function input B – circuit malfunction	Wiring, poor connection, multi-function switch, mechanical fault
P0590	Cruise control system, multi-function input B – circuit stuck	Wiring, poor connection, multi-function switch, mechanical fault
P0591	Cruise control system, multi-function input B – circuit range/performance	Wiring, poor connection, multi-function switch, mechanical fault
P0592	Cruise control system, multi-function input B – circuit low	Wiring short to ground, multi-function switch, mechanical fault
P0593	Cruise control system, multi-function input B – circuit high	Wiring short to positive, multi-function switch, mechanical fault
P0594	Cruise control system, servo control – circuit open	Wiring, servo control solenoid
P0595	Cruise control system, servo control – circuit low	Wiring short to ground, servo control solenoid
P0596	Cruise control system, servo control – circuit high	Wiring short to positive, servo control solenoid
P0597	Thermostat heater control system – circuit open	Wiring, relay, thermostat heater
P0598	Thermostat heater control system – circuit low	Wiring short to ground, relay, thermostat heater
P0599	Thermostat heater control system – circuit high	Wiring short to positive, relay, thermostat heater
P0600	CAN date bus – malfunction	Wiring, connected system, ECM
P0601	Engine control module (ECM) – memory check sum error	ECM
P0602	Engine control module (ECM) – programming error	ECM
P0603	Engine control module (ECM) – KAM error	ECM
P0604	Engine control module (ECM) – RAM error	ECM
P0605	Engine control module (ECM) – ROM error	ECM
P0606	Engine control module (ECM) – processor fault	ECM
P0607	Control module – performance	Control module
P0608	Engine control module (ECM), VSS output A – malfunction	ECM
P0609	Engine control module (ECM), VSS output B – malfunction	ECM
P0610	Control module – vehicle options error	Control module

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0611	Fuel injector control module – performance	Fuel injector control module
P0612	Fuel injector control module – relay control circuit	Wiring, relay,fuel injector control module
P0613	Transmission control module (TCM) processor error	TCM
P0614	Engine control module (ECM)/Transmission control module (TCM) – mismatch	ECM/TCM
P0615	Starter relay – circuit malfunction	Wiring, poor connection, starter relay, ECM
P0616	Starter relay – circuit low	Wiring short to ground, starter relay, ECM
P0617	Starter relay – circuit high	Wiring short to positive, starter relay, ECM
P0618	Alternative fuel control module – KAM error	alternative fuel control module
P0619	Alternative fuel control module – RAM/ROM error	alternative fuel control module
P0620	Alternator, control – circuit malfunction	Wiring, alternator, battery, ECM
P0621	Alternator warning lamp– circuit malfunction	Wiring, alternator warning lamp, ECM
P0622	Alternator, field control – circuit malfunction	Wiring, alternator, battery, ECM
P0623	Generator lamp control – circuit malfunction	Wiring, poor connection, bulb, ECM
P0624	Fuel cap lamp control – circuit malfunction	Wiring, poor connection, bulb, ECM
P0625	Generator field terminal – circuit low	Wiring short to ground, generator
P0626	Generator field terminal – circuit high	Wiring short to positive, generator
P0627	Fuel pump control – circuit open	Wiring, relay, fuel pump
P0628	Fuel pump control – circuit low	Wiring short to ground, relay, fuel pump
P0629	Fuel pump control – circuit high	Wiring short to positive, relay, fuel pump
P0630	VIN not programmed or mismatch – ECM	ECM
P0631	VIN not programmed or mismatch – TCM	TCM
P0632	Odometer not programmed – ECM	ECM
P0633	Immobilizer key not programmed – ECM	ECM
P0634	ECM/TCM – internal termperature too high	Mechanical fault, ECM/TCM
P0635	Power steering (PAS) control – circuit malfunction	Wiring, poor connection, PAS pressure switch, ECM
P0636	Power steering (PAS) control – circuit low	Wiring short to ground, PAS pressure switch, ECM
P0637	Power steering (PAS) control – circuit high	Wiring short to positive, PAS pressure switch, ECM
P0638	Throttle actuator control, bank 1 – range/performance problem	Basic setting not carried out (if applicable), ISC actuator/throttle motor, APP sensor
P0639	Throttle actuator control, bank 2 – range/performance	Wiring, throttle control unit
P0640	Intake air heater control – circuit malfunction	Wiring, relay, intake air heater
P0641	Sensor reference voltage A – circuit open	Wiring short to positive
P0642	Engine control module (ECM), knock control – defective	ECM
P0643	Sensor reference voltage A – circuit high	Wiring short to positive
P0644	Driver display, serial communication – circuit malfunction	Wiring, CAN data bus, ECM
P0645	Air conditioning (AC)	Wiring, AC system

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0646	A/C clutch relay control – circuit low	Wiring short to ground, A/C clutch relay
P0647	A/C clutch relay control – circuit high	Wiring short to positive, A/C clutch relay
P0648	Immobilizer lamp control – circuit malfunction	Wiring, poor connection, bulb, ECM
P0649	Cruise control lamp control – circuit	Wiring, poor connection, bulb, ECM
P0650	Malfunction indicator lamp (MIL) – circuit malfunction	Wiring, MIL, ECM
P0651	Sensor reference voltage B – circuit open	Wiring short to positive
P0652	Sensor reference voltage B – circuit low	Wiring short to ground
P0653	Sensor reference voltage B – circuit high	Wiring short to positive
P0654	Engine rpm, output – circuit malfunction	Wiring, ECM
P0655	Engine hot lamp output – circuit malfunction	Wiring, engine hot lamp, ECM
P0656	Fuel level output – circuit malfunction	Wiring, ECM
P0657	Actuator supply voltage – circuit open	Wiring
P0658	Actuator supply voltage – circuit low	Wiring short to ground, actuator
P0659	Actuator supply voltage – circuit high	Wiring short to positive, actuator
P0660	Intake manifold tuning valve, bank 1 – circuit open	Wiring, intake manifold tuning valve
P0661	Intake manifold tuning valve, bank 1 – circuit low	Wiring short to ground, intake manifold tuning valve
P0662	Intake manifold tuning valve, bank 1 – circuit high	Wiring short to positive, intake manifold tuning valve
P0663	Intake manifold tuning valve, bank 2 – circuit open	Wiring, intake manifold tuning valve
P0664	Intake manifold tuning valve, bank 2 – circuit low	Wiring short to ground, intake manifold tuning valve
P0665	Intake manifold tuning valve, bank 2 – circuit high	Wiring short to positive, intake manifold
P0666	ECM/TCM internal termperature sensor – circuit malfunction	Wiring, poor connection, internal temperature sensor, ECM/TCM
P0667	ECM/TCM internal termperature sensor – range/performance	Wiring, poor connection, internal temperature sensor, ECM/TCM
P0668	ECM/TCM internal termperature sensor – circuit low	Wiring short to ground, internal temperature sensor, ECM/TCM
P0669	ECM/TCM internal termperature sensor – circuit high	Wiring short to positive, internal temperature sensor, ECM/TCM
P0670	Glow plug module control – circuit malfunction	Wiring, poor connection, control module, glow plug, ECM
P0671	Glow plug, cylinder 1 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0672	Glow plug, cylinder 2 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0673	Glow plug, cylinder 3 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0674	Glow plug, cylinder 4 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0675	Glow plug, cylinder 5 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0676	Glow plug, cylinder 6 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0677	Glow plug, cylinder 7 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0678	Glow plug, cylinder 8 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0679	Glow plug, cylinder 9 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0680	Glow plug, cylinder 10 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0681	Glow plug, cylinder 11 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM

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Trouble code	Fault location	Probable cause
P0682	Glow plug, cylinder 12 – circuit malfunction	Wiring, poor connection, relay, control module, glow plug, ECM
P0683	Glow plug control module communication to ECM – malfunction	Wiring, poor connection, control module, ECM
P0684	Glow plug control module communication to ECM – range/performance	Wiring, poor connection, control module, ECM
P0685	ECM power relay control – circuit open	Wiring, ECM relay
P0686	ECM power relay control – circuit low	Wiring short to ground, ECM relay, ECM
P0687	Engine control relay – short to ground	Wiring short to ground, engine control relay, ECM
P0688	Engine control relay – short to positive	Wiring short to positive, engine control relay, ECM
P0689	ECM power relay sense – circuit low	Wiring short to ground, ECM relay, ECM
P0690	ECM power relay sense – circuit high	Wiring short to positive, ECM relay, ECM
P0691	Engine coolant blower motor 1 – short to ground	Wiring short to ground, engine coolant blower motor, ECM
P0692	Engine coolant blower motor 1 – short to positive	Wiring short to positive, engine coolant blower motor, ECM
P0693	Engine coolant blower motor 2 – short to ground	Wiring short to ground, engine coolant blower motor, ECM
P0694	Engine coolant blower motor 2 – short to positive	Wiring short to positive, engine coolant blower motor, ECM
P0695	Fan 3 control – circuit low	Wiring short to ground, fan motor
P0696	Fan 3 control – circuit high	Wiring short to positive, fan motor
P0697	Sensor reference voltage C – circuit open	Wiring short to positive
P0698	Sensor reference voltage C – circuit low	Wiring short to ground
P0699	Sensor reference voltage C – circuit high	Wiring short to positive
P0700	Transmission control system – malfunction	Wiring, TCM
P0701	Transmission control system – range/performance problem	Wiring, TCM
P0702	Transmission control system – electrical	Wiring, TCM
P0703	Torque converter/brake switch B – circuit malfunction	Wiring, torque converter/brake switch, ECM//TCM
P0704	Clutch pedal position (CPP) switch – circuit malfunction	Wiring, CPP switch, ECM/TCM
P0705	Transmission range (TR) sensor/switch, PRNDL input – circuit malfunction	Wiring, TR sensor/switch, ECM/TCM
P0706	Transmission range (TR) sensor/switch – range/performance problem	Wiring, TR sensor/switch
P0707	Transmission range (TR) sensor/switch – low input	Wiring short to ground, TR sensor/switch, ECM/TCM
P0708	Transmission range (TR) sensor/switch –high input	Wiring short to positive, TR sensor/switch, ECM/TCM
P0709	Transmission range (TR) sensor/switch – circuit intermittent	Wiring, poor connection, TR sensor/switch, ECM/TCM
P0710	Transmission fluid temperature (TFT) sensor – circuit malfunction	Wiring, TFT sensor, ECM, ECM/TCM
P0711	Transmission fluid temperature (TFT) sensor – range/performance problem	Wiring, TFT sensor
P0712	Transmission fluid temperature (TFT) sensor – low input	Wiring short to ground, TFT sensor, ECM, ECM/TCM
P0713	Transmission fluid temperature (TFT) sensor – high input	Wiring short to ground, TFT sensor, ECM, ECM/TCM
P0714	Transmission fluid temperature (TFT) sensor – circuit intermittent	Wiring, poor connection, TFT sensor, ECM, ECM/TCM
P0715	Turbine shaft speed (TSS) sensor – circuit malfunction	Wiring, TSS sensor, ECM/TCM
P0716	Turbine shaft speed (TSS) sensor – range/performance problem	Wiring, TSS sensor
P0717	Turbine shaft speed (TSS) sensor – no signal	Wiring, TSS sensor, ECM/TCM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0718	Turbine shaft speed (TSS) sensor – circuit intermittent	Wiring, poor connection, TSS sensor, ECM/TCM
P0719	Torque converter/brake switch B – circuit low	Wiring short to ground, torque converter/brake switch, ECM/TCM
P0720	Output shaft speed (OSS) sensor – circuit malfunction	Wiring, OSS sensor, ECM/TCM
P0721	Output shaft speed (OSS) sensor – range/performance problem	Wiring, OSS sensor
P0722	Output shaft speed (OSS) sensor – no signal	Wiring, OSS sensor, ECM/TCM
P0723	Output shaft speed (OSS) sensor – circuit intermittent	Wiring, poor connection, OSS sensor, ECM/TCM
P0724	Torque converter/brake switch B – circuit high	Wiring short to positive, torque converter/brake switch, ECM/TCM
P0725	Engine RPM input – circuit malfunction	Wiring, CKP/RPM sensor, ECM/TCM
P0726	Engine RPM input – range/performance problem	Wiring, CKP/RPM sensor
P0727	Engine RPM input – no signal	Wiring, CKP/RPM sensor, ECM/TCM
P0728	Engine RPM input – circuit intermittent	Wiring, poor connection, CKP/RPM sensor, ECM/TCM
P0730	Incorrect gear ratio	Wiring, TR sensor/switch, shift solenoid, transmission mechanical fault
P0731	Gear 1 – incorrect ratio	Wiring, TR sensor/switch, shift solenoid, transmission mechanical fault
P0732	Gear 2 – incorrect ratio	Wiring, TR sensor/switch, shift solenoid, transmission mechanical fault
P0733	Gear 3 – incorrect ratio	Wiring, TR sensor/switch, shift solenoid, transmission mechanical fault
P0734	Gear 4 – incorrect ratio	Wiring, TR sensor/switch, shift solenoid, transmission mechanical fault
P0735	Gear 5 – incorrect ratio	Wiring, TR sensor/switch, shift solenoid, transmission mechanical fault
P0736	Reverse – incorrect ratio	Wiring, TR sensor/switch, shift solenoid, transmission mechanical fault
P0737	TCM engine speed output – circuit	Wiring, TCM
P0738	TCM engine speed output – circuit low	Wiring, TCM
P0739	TCM engine speed output – circuit high	Wiring, TCM
P0740	Torque converter clutch (TCC) solenoid – circuit malfunction	Wiring, TCC solenoid, ECM/TCM
P0741	Torque converter clutch (TCC) solenoid – performance or stuck off	Wiring, TCC solenoid
P0742	Torque converter clutch (TCC) solenoid – stuck on	Wiring, TCC solenoid
P0743	Torque converter clutch (TCC) solenoid – electrical	Wiring, TCC solenoid, ECM/TCM
P0744	Torque converter clutch (TCC) solenoid – circuit intermittent	Wiring, poor connection, TCC solenoid, ECM/TCM
P0745	Transmission fluid pressure (TFP) solenoid – circuit malfunction	Wiring, TFP solenoid, ECM/TCM
P0746	Transmission fluid pressure (TFP) solenoid – performance or stuck off	Wiring, TFP solenoid
P0747	Transmission fluid pressure (TFP) solenoid – stuck on	Wiring, TFP solenoid
P0748	Transmission fluid pressure (TFP) solenoid – electrical	Wiring, TFP solenoid, ECM/TCM
P0749	Transmission fluid pressure (TFP) solenoid – circuit intermittent	Wiring, poor connection, TFP solenoid, ECM/TCM

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Trouble code	Fault location	Probable cause
P0750	Shift solenoid (SS) A – circuit malfunction	Wiring, shift solenoid, ECM/TCM
P0751	Shift solenoid (SS) A – performance or stuck off	Wiring, shift solenoid
P0752	Shift solenoid (SS) A – stuck on	Wiring, shift solenoid
P0753	Shift solenoid (SS) A – electrical	Wiring, shift solenoid, ECM/TCM
P0754	Shift solenoid (SS) A – circuit intermittent	Wiring, poor connection, shift solenoid, ECM/TCM
P0755	Shift solenoid (SS) B – circuit malfunction	Wiring, shift solenoid, ECM/TCM
P0756	Shift solenoid (SS) B – performance or stuck off	Wiring, shift solenoid
P0757	Shift solenoid (SS) B – stuck on	Wiring, shift solenoid
P0758	Shift solenoid (SS) B – electrical	Wiring, shift solenoid, ECM/TCM
P0759	Shift solenoid (SS) B – circuit intermittent	Wiring, poor connection, shift solenoid, ECM/TCM
P0760	Shift solenoid (SS) C – circuit malfunction	Wiring, shift solenoid, ECM/TCM
P0761	Shift solenoid (SS) C – performance or stuck off	Wiring, shift solenoid
P0762	Shift solenoid (SS) C – stuck on	Wiring, shift solenoid
P0763	Shift solenoid (SS) C – electrical	Wiring, shift solenoid, ECM/TCM
P0764	Shift solenoid (SS) C – circuit intermittent	Wiring, poor connection, shift solenoid, ECM/TCM
P0765	Shift solenoid (SS) D – circuit malfunction	Wiring, shift solenoid, ECM/TCM
P0766	Shift solenoid (SS) D – performance or stuck off	Wiring, shift solenoid
P0767	Shift solenoid (SS) D – stuck on	Wiring, shift solenoid
P0768	Shift solenoid (SS) D – electrical	Wiring, shift solenoid, ECM/TCM
P0769	Shift solenoid (SS) D – circuit intermittent	Wiring, poor connection, shift solenoid, ECM/TCM
P0770	Shift solenoid (SS) E – circuit malfunction	Wiring, shift solenoid, ECM/TCM
P0771	Shift solenoid (SS) E – performance or stuck off	Wiring, shift solenoid
P0772	Shift solenoid (SS) E – stuck on	Wiring, shift solenoid
P0773	Shift solenoid (SS) E – electrical	Wiring, shift solenoid, ECM/TCM
P0774	Shift solenoid (SS) E – circuit intermittent	Wiring, poor connection, shift solenoid, ECM/TCM
P0775	Pressure control solenoid B – malfunction	Pressure control solenoid
P0776	Pressure control solenoid B – performance or stuck off	Wiring, pressure control solenoid
P0777	Pressure control solenoid B – stuck on	Wiring, pressure control solenoid
P0778	Pressure control solenoid B – electrical	Wiring, pressure control solenoid
P0779	Pressure control solenoid B – intermittent	Wiring, poor connection, pressure control solenoid
P0780	Gear selection – shift malfunction	Wiring, TR sensor, shift solenoids, transmission mechanical fault
P0781	Gear selection, 1-2 – shift malfunction	Wiring, TR sensor, shift solenoids, transmission mechanical fault
P0782	Gear selection, 2-3 – shift malfunction	Wiring, TR sensor, shift solenoids, transmission mechanical fault
P0783	Gear selection, 3-4 – shift malfunction	Wiring, TR sensor, shift solenoids, transmission mechanical fault
P0784	Gear selection, 4-5 – shift malfunction	Wiring, TR sensor, shift solenoids, transmission mechanical fault
P0785	Shift/timing solenoid – circuit malfunction	Wiring, shift/timing solenoid, ECM/TCM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0786	Shift/timing solenoid – range/performance problem	Wiring, shift/timing solenoid
P0787	Shift/timing solenoid – low	Wiring short to ground, shift/timing solenoid, ECM/TCM
P0788	Shift/timing solenoid – high	Wiring short to positive, shift/timing solenoid, ECM/TCM
P0789	Shift/timing solenoid – intermittent	Wiring, poor connection, shift/timing solenoid, ECM/TCM
P0790	Transmission mode selection switch – circuit malfunction	Wiring, transmission mode selection switch, ECM/TCM
P0791	Intermediate shaft speed sensor – circuit malfunction	Wiring, poor connection, intermediate shaft speed sensor, ECM/TCM
P0792	Intermediate shaft speed sensor – range/performance problem	Wiring, poor connection, intermediate shaft speed sensor, ECM/TCM
P0793	Intermediate shaft speed sensor – no signal	Wiring, poor connection,short to ground, intermediate shaft speed sensor, ECM/TCM
P0794	Intermediate shaft speed sensor – intermittent circuit malfunction	Wiring, poor connection, intermediate shaft speed sensor, ECM/TCM
P0795	Transmisssion fluid pressure (TFP) solenoid C – circuit malfunction	Wiring, poor connection, TFP solenoid, ECM/TCM
P0796	Transmisssion fluid pressure (TFP) solenoid C – performance or stuck off	Wiring, poor connection, TFP solenoid, ECM/TCM
P0797	Transmisssion fluid pressure (TFP) solenoid C – stuck on	Wiring, poor connection, TFP solenoid, ECM/TCM
P0798	Transmisssion fluid pressure (TFP) solenoid C – electrical malfunction	Wiring, poor connection, TFP solenoid, ECM/TCM
P0799	Transmisssion fluid pressure (TFP) solenoid C – intermittent circuit malfunction	Wiring, poor connection, ECM/TCM
P0800	Transfer case control system, MIL request – malfunction	Wiring, mechanical fault
P0801	Reverse inhibit circuit – malfunction	Wiring, poor connection
P0802	Transmission control system, MIL request – circuit open	Wiring, mechanical fault
P0803	1-4 Upshift (Skip shift) solenoid – circuit malfunction	Wiring, poor connection, upshift solenoid
P0804	1-4 Upshift (Skip shift) warning lamp – circuit malfunction	Wiring, poor connection
P0805	Clutch position sensor – circuit malfunction	Wiring, poor connection, clutch position sensor, ECM/TCM
P0806	Clutch position sensor – range/performance problem	Wiring, poor connection, clutch position sensor, ECM/TCM
P0807	Clutch position sensor – low input	Wiring, short to ground, clutch position sensor, ECM/TCM
P0808	Clutch position sensor – high input	Wiring, short to positive, clutch position sensor, ECM/TCM
P0809	Clutch position sensor – intermittent circuit malfunction	Wiring, poor connection, clutch position sensor, ECM/TCM
P0810	Clutch position control error	Wiring, poor connection, ECM/TCM
P0811	Excessive clutch slip	Wiring, poor connection, mechanical fault, ECM/TCM
P0812	Reverse gear – input circuit malfunction	Wiring, poor connection, ECM/TCM
P0813	Reverse gear – output circuit malfunction	Wiring, poor connection, ECM/TCM
P0814	Transmission range (TR) display – circuit malfunction	Wiring, poor connection, TR sensor, ECM/TCM
P0815	Upshift switch – circuit malfunction	Wiring, poor connection, upshift switch, ECM/TCM
P0816	Downshift switch – circuit malfunction	Wiring, poor connection, downshift switch, ECM/TCM
P0817	Starter disable circuit – malfunction	Wiring, poor connection, ECM/TCM
P0818	Driveline disconnect switch – circuit malfunction	Wiring, poor connection, upshift switch, ECM/TCM
P0819	Up and down shift switch to transmission range – correlation	Wiring, poor connection,TR sensor, ECM/TCM
P0820	Gear lever X-Y position sensor – circuit malfunction	Wiring, poor connection, gear lever position sensor, ECM/TCM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0821	Gear lever X position sensor – circuit malfunction	Wiring, poor connection, gear lever position sensor, ECM/TCM
P0822	Gear lever Y position sensor – circuit malfunction	Wiring, poor connection, gear lever position sensor, ECM/TCM
P0823	Gear lever X position sensor – circuit intermittent	Wiring, poor connection, gear lever position sensor, ECM/TCM
P0824	Gear lever Y position sensor – circuit intermittent	Wiring, poor connection, gear lever position sensor, ECM/TCM
P0825	Gear lever push-pull switch – circuit malfunction	Wiring, poor connection, gear lever push-pull switch, ECM/TCM
P0826	Up and down switch – input circuit	Wiring, Up/down switch
P0827	Up and down switch – input circuit low	Wiring short to ground, Up/down switch
P0828	Up and down switch – input circuit high	Wiring short to positive, Up/down switch
P0829	5-6 Shift	Mechanical fault
P0830	Clutch pedal position (CPP) switch A – circuit malfunction	Wiring, poor connection, CPP switch, ECM/TCM
P0831	Clutch pedal position (CPP) switch A – low input	Wiring, short to ground, CPP switch, ECM/TCM
P0832	Clutch pedal position (CPP) switch A – high input	Wiring, short to positive, CPP switch, ECM/TCM
P0833	Clutch pedal position (CPP) switch B – circuit malfunction	Wiring, poor connection, CPP switch, ECM/TCM
P0834	Clutch pedal position (CPP) switch B – low input	Wiring, short to ground, CPP switch, ECM/TCM
P0835	Clutch pedal position (CPP) switch B – high input	Wiring, short to positive, CPP switch, ECM/TCM
P0836	Four wheel drive switch – circuit malfunction	Wiring, poor connection, four wheel drive switch, ECM/TCM
P0837	Four wheel drive switch – range/performance problem	Wiring, poor connection, four wheel drive switch, ECM/TCM
P0838	Four wheel drive switch – low input	Wiring, short to ground, four wheel drive switch, ECM/TCM
P0839	Four wheel drive switch – high input	Wiring, short to positive, four wheel drive switch, ECM/TCM
P0840	Transmission fluid pressure (TFP) sensor A – circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch A – circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0841	Transmission fluid pressure (TFP) sensor A – range/performance problem	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch A – range/performance problem	Wiring, poor connection, TFP switch, ECM/TCM
P0842	Transmission fluid pressure (TFP) sensor A – low input	Wiring, short to ground, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch A – low input	Wiring, short to ground, TFP switch, ECM/TCM
P0843	Transmission fluid pressure (TFP) sensor A – high input	Wiring, short to positive, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch A – high input	Wiring, short to positive, TFP switch, ECM/TCM
P0844	Transmission fluid pressure (TFP) sensor A – intermittent circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch A – intermittent circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0845	Transmission fluid pressure (TFP) sensor B – circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch B – circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0846	Transmission fluid pressure (TFP) sensor B – range/performance problem	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch B – range/performance problem	Wiring, poor connection, TFP switch, ECM/TCM
P0847	Transmission fluid pressure (TFP) sensor B – low input	Wiring, short to ground, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch B – low input	Wiring, short to ground, TFP switch, ECM/TCM
P0848	Transmission fluid pressure (TFP) sensor B – high input	Wiring, short to positive, TFP sensor, ECM/TCM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
	Transmission fluid pressure (TFP) switch B – high input	Wiring, short to positive, TFP switch, ECM/TCM
P0849	Transmission fluid pressure (TFP) sensor B – intermittent circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch B – intermittent circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0850	Park/neutral position (PNP) switch – input circuit malfunction	Wiring, PNP switch, ECM/TCM
P0851	Park/neutral position (PNP) switch – input circuit low	Wiring, short to ground, PNP switch, ECM/TCM
P0852	Park/neutral position (PNP) switch – input circuit high	Wiring, short to positive, PNP switch, ECM/TCM
P0853	Drive switch – input circuit malfunction	Wiring, drive switch, ECM/TCM
P0854	Drive switch – input circuit low	Wiring, short to ground, drive switch, ECM/TCM
P0855	Drive switch – input circuit high	Wiring, short to positive, drive switch, ECM/TCM
P0856	Traction control input signal – malfunction	Wiring, poor connection, ECM/TCM
P0857	Traction control input signal – range/performance problem	Wiring, poor connection, ECM/TCM
P0858	Traction control input signal – low	Wiring, short to ground, ECM/TCM
P0859	Traction control input signal – high	Wiring, short to positive, ECM/TCM
P0860	Gear shift module communication circuit – malfunction	Wiring, poor connection, gear shift module, ECM/TCM
P0861	Gear shift module communication circuit – low input	Wiring, short to ground, gear shift module, ECM/TCM
P0862	Gear shift module communication circuit – low input	Wiring, short to positive, gear shift module, ECM/TCM
P0863	Transmission control module (TCM) communication circuit – malfunction	Wiring, poor connection, TCM
P0864	Transmission control module (TCM) communication circuit – range/performance problem	Wiring, poor connection, TCM
P0865	Transmission control module (TCM) communication circuit – low input	Wiring, short to ground, TCM
P0866	Transmission control module (TCM) communication circuit – high input	Wiring, short to positive, TCM
P0867	Transmission fluid pressure (TFP) sensor	Wiring, poor connection, TFP switch, ECM/TCM
P0868	Transmission fluid pressure (TFP) sensor – low	Wiring, short to ground, TFP switch, ECM/TCM
P0869	Transmission fluid pressure (TFP) sensor – high	Wiring, short to positive, TFP switch, ECM/TCM
P0870	Transmission fluid pressure (TFP) sensor C – circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch C – circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0871	Transmission fluid pressure (TFP) sensor C – range/performance	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch C – range/performance	Wiring, poor connection, TFP switch, ECM/TCM
P0872	Transmission fluid pressure (TFP) sensor C – low input	Wiring, short to ground, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch C – low input	Wiring, short to ground, TFP switch, ECM/TCM
P0873	Transmission fluid pressure (TFP) sensor C – high input	Wiring, short to positive, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch C – high input	Wiring, short to positive, TFP switch, ECM/TCM
P0874	Transmission fluid pressure (TFP) sensor C – intermittent circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch C – intermittent circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0875	Transmission fluid pressure (TFP) sensor D – circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch D – circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0876	Transmission fluid pressure (TFP) sensor D – range/performance	Wiring, poor connection, TFP sensor, ECM/TCM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
	Transmission fluid pressure (TFP) switch D – range/performance	Wiring, poor connection, TFP switch, ECM/TCM
P0877	Transmission fluid pressure (TFP) sensor D – low input	Wiring, short to ground, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch D – low input	Wiring, short to ground, TFP switch, ECM/TCM
P0878	Transmission fluid pressure (TFP) sensor D – high input	Wiring, short to positive, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch D – high input	Wiring, short to positive, TFP switch, ECM/TCM
P0879	Transmission fluid pressure (TFP) sensor D – intermittent circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch D – intermittent circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0880	Transmission control module (TCM) – power input signal malfunction	Wiring, poor connection, TCM
P0881	Transmission control module (TCM) – power input signal range/performance	Wiring, poor connection, TCM
P0882	Transmission control module (TCM) – power input signal low	Wiring, short to ground, TCM
P0883	Transmission control module (TCM) – power input signal high	Wiring, short to positive, TCM
P0884	Transmission control module (TCM) – power input signal intermittent malfunction	Wiring, poor connection, TCM
P0885	Transmission control module (TCM) power relay – control circuit open	Wiring, poor connection, TCM power relay, TCM
P0886	Transmission control module (TCM) power relay – control circuit low	Wiring, short to ground, TCM power relay, TCM
P0887	Transmission control module (TCM) power relay – control circuit high	Wiring, short to positive, TCM power relay, TCM
P0888	Transmission control module (TCM) power relay – sense circuit malfunction	Wiring, poor connection, TCM power relay, TCM
P0889	Transmission control module (TCM) power relay – sense circuit range/performance	Wiring, poor connection, TCM power relay, TCM
P0890	Transmission control module (TCM) power relay – sense circuit low	Wiring, short to ground, TCM power relay, TCM
P0891	Transmission control module (TCM) power relay – sense circuit high	Wiring, short to positive, TCM power relay, TCM
P0892	Transmission control module (TCM) power relay – sense circuit intermittent malfunction	Wiring, poor connection, TCM power relay, TCM
P0893	Multiple gears engaged	Mechanical fault
P0894	Transmission component slipping	Mechanical fault
P0895	Shift time too short	Mechanical fault
P0896	Shift time too long	Mechanical fault
P0897	Transmission fluid deteriorated	Mechanical fault
P0898	Transmission control system – MIL request – circuit low	Wiring, poor connection, short to ground
P0899	Transmission control system – MIL request – circuit high	Wiring, poor connection, short to positive
P0900	Clutch actuator – circuit open	Wiring, clutch actuator, ECM/TCM
P0901	Clutch actuator – circuit range/performance	Wiring, poor connection, clutch actuator, ECM/TCM
P0902	Clutch actuator – circuit low	Wiring, short to ground, clutch actuator, ECM/TCM
P0903	Clutch actuator – circuit high	Wiring, short to positive, clutch actuator, ECM/TCM
P0904	Transmission gate select position circuit – malfunction	Wiring, poor connection, ECM/TCM
P0905	Transmission gate select position circuit – range/performance	Wiring, poor connection, ECM/TCM
P0906	Transmission gate select position circuit – low	Wiring, short to ground, ECM/TCM
P0907	Transmission gate select position circuit – high	Wiring, short to positive, ECM/TCM
P0908	Transmission gate select position circuit – intermittent circuit malfunction	Wiring, poor connection, ECM/TCM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0909	Transmission gate select control error	Mechanical fault
P0910	Transmission gate select actuator – circuit open	Wiring, transmission gate select actuator, ECM/TCM
P0911	Transmission gate select actuator – circuit range/performance	Wiring, poor connection, transmission gate select actuator, ECM/TCM
P0912	Transmission gate select actuator – circuit low	Wiring, short to ground, transmission gate select actuator, ECM/TCM
P0913	Transmission gate select actuator – circuit high	Wiring, short to positive, transmission gate select actuator, ECM/TCM
P0914	Gear shift position circuit – malfunction	Wiring, poor connection, ECM/TCM
P0915	Gear shift position circuit – range/performance	Wiring, poor connection, ECM/TCM
P0916	Gear shift position circuit – low	Wiring, short to ground, ECM/TCM
P0917	Gear shift position circuit – high	Wiring, short to positive, ECM/TCM
P0918	Gear shift position circuit – intermittent malfunction	Wiring, poor connection, ECM/TCM
P0919	Gear shift position control – error	Wiring, poor connection, ECM/TCM
P0820	Gear shift forward actuator – circuit open	Wiring, gear shift forward actuator, ECM/TCM
P0821	Gear shift forward actuator – circuit range/performance	Wiring, poor connection, gear shift forward actuator, ECM/TCM
P0822	Gear shift forward actuator – circuit low	Wiring, short to ground, gear shift forward actuator, ECM/TCM
P0823	Gear shift forward actuator – circuit high	Wiring, short to positive, gear shift forward actuator, ECM/TCM
P0824	Gear shift reverse actuator – circuit open	Wiring, gear shift reverse actuator, ECM/TCM
P0825	Gear shift reverse actuator – circuit range/performance	Wiring, poor connection, gear shift reverse actuator, ECM/TCM
P0826	Gear shift reverse actuator – circuit low	Wiring, short to ground, gear shift reverse actuator, ECM/TCM
P0927	Gear shift reverse actuator – circuit high	Wiring, short to positive, gear shift reverse actuator, ECM/TCM
P0928	Gear shift lock solenoid – circuit open	Wiring, gear shift lock solenoid, ECM/TCM
P0929	Gear shift lock solenoid – circuit range/performance	Wiring, gear shift lock solenoid, ECM/TCM
P0930	Gear shift lock solenoid – circuit low	Wiring, short to ground, gear shift lock solenoid, ECM/TCM
P0931	Gear shift lock solenoid – circuit high	Wiring, short to positive, gear shift lock solenoid, ECM/TCM
P0932	Hydraulic pressure sensor – circuit malfunction	Wiring, poor connection, hydraulic pressure sensor, ECM/TCM
P0933	Hydraulic pressure sensor – range/performance	Wiring, hydraulic pressure sensor, ECM/TCM
P0934	Hydraulic pressure sensor – circuit low input	Wiring, short to ground, hydraulic pressure sensor, ECM/TCM
P0935	Hydraulic pressure sensor – circuit high input	Wiring, short to positive, hydraulic pressure sensor, ECM/TCM
P0936	Hydraulic pressure sensor – circuit intermittent	Wiring, poor connection, hydraulic pressure sensor, ECM/TCM
P0937	Hydraulic oil temperature sensor – circuit malfunction	Wiring, poor connection, hydraulic oil temperature sensor, ECM/TCM
P0938	Hydraulic oil temperature sensor – range/performance	Wiring, hydraulic oil temperature sensor, ECM/TCM
P0939	Hydraulic oil temperature sensor – circuit low input	Wiring, short to ground, hydraulic oil temperature sensor, ECM/TCM
P0940	Hydraulic oil temperature sensor – circuit high input	Wiring, short to positive, hydraulic oil temperature sensor, ECM/TCM
P0941	Hydraulic oil temperature sensor – circuit intermittent	Wiring, poor connection, hydraulic oil temperature sensor, ECM/TCM
P0942	Hydraulic pressure unit	Mechanical fault
P0943	Hydraulic pressure unit – cycling period too short	Mechanical fault
P0944	Hydraulic pressure unit – loss of pressure	Mechanical fault

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0945	Hydraulic pump relay – circuit open	Wiring, hydraulic pump relay, ECM/TCM
P0946	Hydraulic pump relay – circuit range/performance	Wiring, hydraulic pump relay, ECM/TCM
P0947	Hydraulic pump relay – circuit low	Wiring, short to ground, hydraulic pump relay, ECM/TCM
P0948	Hydraulic pump relay – circuit high	Wiring, short to positive, hydraulic pump relay, ECM/TCM
P0949	ASM – adaptive learning not done	ECM/TCM
P0850	ASM control circuit	Wiring, poor connection, ECM/TCM
P0851	ASM control circuit – range/performance	Wiring, poor connection, ECM/TCM
P0852	ASM control circuit – low	Wiring, poor connection, short to ground, ECM/TCM
P0853	ASM control circuit – high	Wiring, poor connection, short to positive, ECM/TCM
P0854	ASM – intermittent circuit malfunction	Wiring, poor connection, ECM/TCM
P0855	ASM mode circuit – malfunction	Wiring, poor connection, ECM/TCM
P0856	ASM mode circuit – range/performance	Wiring, poor connection, ECM/TCM
P0957	ASM mode circuit – low	Wiring, poor connection, short to ground, ECM/TCM
P0958	ASM mode circuit – high	Wiring, poor connection, short to positive, ECM/TCM
P0959	ASM mode circuit – intermittent circuit malfunction	Wiring, poor connection, ECM/TCM
P0960	Pressure control (PC) solenoid A – control circuit open	Wiring, poor connection, pressure control solenoid, ECM/TCM
P0961	Pressure control (PC) solenoid A – control circuit range/performance	Wiring, poor connection, pressure control solenoid, ECM/TCM
P0962	Pressure control (PC) solenoid A – control circuit low	Wiring, short to ground, pressure control solenoid, ECM/TCM
P0963	Pressure control (PC) solenoid A – control circuit high	Wiring, short to positive, pressure control solenoid, ECM/TCM
P0964	Pressure control (PC) solenoid B – control circuit open	Wiring, poor connection, pressure control solenoid, ECM/TCM
P0965	Pressure control (PC) solenoid B – control circuit range/performance	Wiring, poor connection, pressure control solenoid, ECM/TCM
P0966	Pressure control (PC) solenoid B – control circuit low	Wiring, short to ground, pressure control solenoid, ECM/TCM
P0967	Pressure control (PC) solenoid B – control circuit high	Wiring, short to positive, pressure control solenoid, ECM/TCM
P0968	Pressure control (PC) solenoid C – control circuit open	Wiring, poor connection, pressure control solenoid, ECM/TCM
P0969	Pressure control (PC) solenoid C – control circuit range/performance	Wiring, poor connection, pressure control solenoid, ECM/TCM
P0970	Pressure control (PC) solenoid C – control circuit low	Wiring, short to ground, pressure control solenoid, ECM/TCM
P0971	Pressure control (PC) solenoid C – control circuit high	Wiring, short to positive, pressure control solenoid, ECM/TCM
P0972	Shift solenoid (SS) A – control circuit range/performance	Wiring, poor connection, shift solenoid, ECM/TCM
P0973	Shift solenoid (SS) A – control circuit low	Wiring, short to ground, shift solenoid, ECM/TCM
P0974	Shift solenoid (SS) A – control circuit high	Wiring, short to positive, shift solenoid, ECM/TCM
P0975	Shift solenoid (SS) B – control circuit range/performance	Wiring, poor connection, shift solenoid, ECM/TCM
P0976	Shift solenoid (SS) B – control circuit low	Wiring, short to ground, shift solenoid, ECM/TCM
P0977	Shift solenoid (SS) B – control circuit high	Wiring, short to positive, shift solenoid, ECM/TCM
P0978	Shift solenoid (SS) C – control circuit range/performance	Wiring, poor connection, shift solenoid, ECM/TCM
P0979	Shift solenoid (SS) C – control circuit low	Wiring, short to ground, shift solenoid, ECM/TCM
P0980	Shift solenoid (SS) C – control circuit high	Wiring, short to positive, shift solenoid, ECM/TCM

OBD-II trouble code table

Trouble code	Fault location	Probable cause
P0981	Shift solenoid (SS) D – control circuit range/performance	Wiring, poor connection, shift solenoid, ECM/TCM
P0982	Shift solenoid (SS) D – control circuit low	Wiring, short to ground, shift solenoid, ECM/TCM
P0983	Shift solenoid (SS) D – control circuit high	Wiring, short to positive, shift solenoid, ECM/TCM
P0984	Shift solenoid (SS) E – control circuit range/performance	Wiring, poor connection, shift solenoid, ECM/TCM
P0985	Shift solenoid (SS) E – control circuit low	Wiring, short to ground, shift solenoid, ECM/TCM
P0986	Shift solenoid (SS) E – control circuit high	Wiring, short to positive, shift solenoid, ECM/TCM
P0987	Transmission fluid pressure (TFP) sensor E – circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch E – circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0988	Transmission fluid pressure (TFP) sensor E – circuit range/performance	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch E – circuit range/performance	Wiring, poor connection, TFP switch, ECM/TCM
P0989	Transmission fluid pressure (TFP) sensor E – circuit low	Wiring, short to ground, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch E – circuit low	Wiring, short to ground, TFP switch, ECM/TCM
P0990	Transmission fluid pressure (TFP) sensor E – circuit high	Wiring, short to positive, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch E – circuit high	Wiring, short to positive, TFP switch, ECM/TCM
P0991	Transmission fluid pressure (TFP) sensor E – circuit intermittent	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch E – circuit intermittent	Wiring, poor connection, TFP switch, ECM/TCM
P0992	Transmission fluid pressure (TFP) sensor F – circuit malfunction	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch F – circuit malfunction	Wiring, poor connection, TFP switch, ECM/TCM
P0993	Transmission fluid pressure (TFP) sensor F – circuit range/performance	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch F – circuit range/performance	Wiring, poor connection, TFP switch, ECM/TCM
P0994	Transmission fluid pressure (TFP) sensor F – circuit low	Wiring, short to ground, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch F – circuit low	Wiring, short to ground, TFP switch, ECM/TCM
P0995	Transmission fluid pressure (TFP) sensor F – circuit high	Wiring, short to positive, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch F – circuit high	Wiring, short to positive, TFP switch, ECM/TCM
P0996	Transmission fluid pressure (TFP) sensor F – circuit intermittent	Wiring, poor connection, TFP sensor, ECM/TCM
	Transmission fluid pressure (TFP) switch F – circuit intermittent	Wiring, poor connection, TFP switch, ECM/TCM
P0997	Shift solenoid (SS) F – control circuit range/performance	Wiring, poor connection, shift solenoid, ECM/TCM
P0998	Shift solenoid (SS) F – control circuit low	Wiring, short to ground, shift solenoid, ECM/TCM
P0999	Shift solenoid (SS) F – control circuit high	Wiring, short to positive, shift solenoid, ECM/TCM

HYUNDAI
Specific Trouble Codes

Trouble code	Fault location
P1043	DMTL - Power Stage (Valve)
P1106	Manifold Absolute Pressure Sensor Circuit Intermittent high
P1107	Manifold Absolute Pressure Sensor Circuit Intermittent low
P1111	Intake Air Temperature Sensor Circuit Intermittent high
P1112	Intak Air Temperature Sensor Circuit Intermittent low
P1114	Engine Coolant Temperature Sensor Circuit Intermittent low
P1115	Engine Coolant Temperature Sensor Circuit Intermittent high
P1116	Boost Pressure Sensor Circuit Malfunction
P1116	Boost Pressure Sensor Circuit - Malfunction
P1119	Inlet Metering Valve Control Malfunction
P1120	Electronic Governor Circuit - Malfunction
P1120	Inlet Metering Valve Malfunction
P1120	APS Input Circuit No Signal
P1121	APS PWM Output Circuit Malfunction
P1122	Boost Pressure Sensor-Over Pressure
P1122	Inlet Metering Valve VLC Malfunction
P1123	Timer Position Sensor-Malfunction
P1127	Control Sleeve Position Sensor Circuit - Malfunction
P1131	Fuel Quantity Adjust Resistor Circuit - Malfunction
P1135	Time Control Valve Circuit - Malfunction
P1140	Inlet Air Temperature Sensor Malfunction
P1145	Overrun monitoring error
P1150	Barometric Pressure Sensor Circuit
P1170	Atmospheric Pressure Sensor Malfunction
P1171	CPC Mode Monitoring - Low Input
P1172	CPC Mode Monitoring - High Input
P1173	CPC Mode Monitoring - maximum PCV pressure exceeded
P1180	Fuel Pressure Regulator - Malfunction

Trouble code	Fault location
P1181	Fuel Pressure Monitoring - Malfunction
P1182	Fuel Pressure Regulator - Short Circuit
P1182	Fuel Pressure Monitoring - Malfunction
P1183	Fuel Pressure Monitoring - Malfunction
P1183	Fuel Pressure Regulator - Open Circuit
P1184	Fuel Pressure Monitoring - Malfunction
P1184	Fuel Pressure Regulator - Power
P1185	Fuel Pressure Monitoring - Malfunction
P1185	Fuel Pressure Monitoring - Excessive
P1185	Maximum Pressure Exceeded
P1186	Fuel Pressure Monitoring - Malfunction
P1186	Minimum Pressure at Engine Speed Too Low
P1186	Fuel Pressure Monitoring - too Low
P1187	Fuel Pressure Monitoring - Malfunction
P1187	Fuel Pressure Monitoring - Regulator Valve Stuck
P1188	Fuel Pressure Monitoring - Malfunction
P1188	Fuel Pressure Monitoring - Leakage
P1189	Governer Deviation
P1190	Intake Throttle Actuator-Malfunction
P1190	Intake Throttle Actuator-Malfunction
P1201	Cylinder 1 - Gasoline Injector input line circuit Low
P1202	Cylinder 1 - Gasoline Injector input line circuit High
P1203	Cylinder 2 - Gasoline Injector input line circuit Low
P1204	Cylinder 2 - Gasoline Injector input line circuit High
P1205	Cylinder 3 - Gasoline Injector input line circuit Low
P1206	Cylinder 3 - Gasoline Injector input line circuit High
P1207	Cylinder 4 - Gasoline Injector input line circuit Low
P1208	Cylinder 4 - Gasoline Injector input line circuit High

Trouble code	Fault location
P1209	Cylinder 5 - Gasoline Injector input line circuit Low
P1210	Cylinder 5 - Gasoline Injector input line circuit High
P1211	Cylinder 6 - Gasoline Injector input line circuit Low
P1212	Cylinder 6 - Gasoline Injector input line circuit High
P1218	CVT Protection Logic Active
P1229	Fuel Pump Diagnosis Malfunction
P1231	Fuel Pump malfunction
P1231	LPG Fuel Pump Driver Malfunction
P1240	Injector Leak Detected
P1261	Cylinder 1 - Gas Injector Circuit Low
P1262	Cylinder 1 - Gas Injector Circuit High
P1264	Cylinder 2 - Gas Injector Circuit Low
P1265	Cylinder 2 - Gas Injector Circuit High
P1267	Cylinder 3 - Gas Injector Circuit Low
P1268	Cylinder 3 - Gas Injector Circuit High
P1270	Cylinder 4 - Gas Injector Circuit Low
P1271	Cylinder 4 - Gas Injector Circuit High
P1273	Cylinder 5 - Gas Injector Circuit Low
P1274	Cylinder 5 - Gas Injector Circuit High
P1276	Cylinder 6 - Gas Injector Circuit Low
P1277	Cylinder 6 - Gas Injector Circuit High
P1281	Injector Cut solenoid 1 Circuit Low
P1282	Injector Cut solenoid 1 Circuit High
P1283	Injector Cut solenoid 2 Circuit Low
P1284	Injector Cut solenoid 2 Circuit High
P1285	Injector Cut solenoid 3 Circuit Low
P1286	Injector Cut solenoid 3 Circuit High
P1287	Injector Cut solenoid 4 Circuit Low

Hyundai - Specific Trouble Codes

Trouble code	Fault location
P1288	Injector Cut solenoid 4 Circuit High
P1289	Injector Cut solenoid 5 Circuit Low
P1290	Injector Cut solenoid 5 Circuit High
P1291	Injector Cut solenoid 6 Circuit Low
P1292	Injector Cut solenoid 6 Circuit High
P1295	Limp Home Mode - Power Management
P12BF	ECU Torque Monitoring - Not Plausible Signal
P1300	Crankshaft Position-Camshaft Position Correlation
P1300	Injector Specific Data Fault
P1302	ECU Torque Monitoring - ADC Error
P1310	Injector Control Circuit Fault
P1380	Cruise Control On Lamp Error
P1405	CPF-Permanent Regeneration
P1406	Exhaust Gas Temperature Not Plausible Between Calculated And Simulated
P1406	Turbine in temp signal not consistent
P1407	DOC Temp sensor not consistent
P1407	Plausibility Of Temperature Calculated And Simulated Upstream Of Particulate Filter
P1458	A/C Switch Circuit Malfunction
P1500	Vehicle Speed Sensor Signal Circuit Malfunction
P1501	Battery Temperature Too High Diagnostic
P1502	Battery Not Charging Diagnostic
P1505	Idle Speed Control Actuator Signal Low of Coil #1
P1506	Idle Speed Control Actuator Signal High of Coil #1
P1507	Idle Speed Control Actuator Signal Low of Coil #2
P1508	Idle Speed Control Actuator Signal High of Coil #2
P1510	LPG Switch Line Malfunction
P1522	Sensor Supply Voltage 1-Low Input
P1523	Throttle Actuator Control System - Throttle Valve Stuck
P1523	Sensor Supply Voltage 1-High Input
P1524	Sensor Supply Voltage 2-Low Input
P1525	Sensor Reference Voltage - “APS/BPS”
P1525	Sensor Supply Voltage 2-High Input
P1526	Sensor Supply Voltage 1-Malfunction
P1527	Sensor Supply Voltage 2-Malfunction
P1530	Maximum Vehicle Speed Limiting-Malfunction
P1539	Check IFB ECU (MIL on Error)
P1539	IFB ECU-Malfunction
P1543	Brake Switch Signal Fault

Trouble code	Fault location
P1550	Knock Sensor Evaluation IC
P1560	Knock Control Serial Port Interface check (Bank 1)
P1562	System Voltage Low (IFB)
P1563	System Voltage High (IFB)
P1566	Analog Battery Sensor Circuit
P1575	Wiper Motor Signal High
P1586	MT/AT Encoding Signal Malfunction
P1587	CAN Communication Error (MT/AT Recognition Error)
P1588	MT/AT Auto Recognition Line Error
P1588	Signal Change Through MT/AT Line (During Engine Running)
P1589	Vehicle Type Switch Signal error
P1591	Not Plausible DPF Auto Recognition
P1592	Changed Signal of DPF Auto Recognition
P1593	Not Plausible 2WD/4WD Auto Recognition
P1594	Changed Signal of 2WD/4WD Auto Recognition
P1602	CVT No Learning & No EOL Data
P1602	CAN Communication-No Signal
P1603	CAN Communication Error
P1604	No ID From ECU
P1605	Internal Control Module Read Only Memory (ROM) Error (IFB)
P1607	Serial Communication Problem with IFB ECU (Timeout)
P1608	ECU Fault
P1610	Non-Immobilizer-EMS Connected to an Immobilizer
P1610	Sensor Reference Voltage Fault
P1611	Immobilizer-Transponder Malfunction
P1612	Immobilizer Smartra Malfunction
P1613	Immobilizer Communication-Malfunction
P1613	ECU-Failure
P1614	ECU Software Error
P1615	P/N Relay
P1615	Starter Relay Circuit (P/N Relay)
P1615	P/N Relay
P1616	Main Relay Control Circuit Malfunction
P161B	ECM Torque Calculation Performance
P1620	A/C Compressor Relay Circuit Malfunction
P1620	A/C Compressor Relay-Short
P1621	Fuel Cut Solenoid Valve Circuit
P1621	A/C Compressor Relay Circuit Malfunction
P1621	A/C Compressor Relay Circuit - Open or Short
P1622	A/C Compressor Relay Circuit Malfunction

Trouble code	Fault location
P1623	Cooling Fan Relay (Low) Circuit-Malfunction
P1623	Cooling Fan Relay Circuit Malfunction
P1624	Idle Stop Inhibit Lamp Ciruit Failure
P1624	Cooling Fan Relay (Low) Circuit-Malfunction
P1625	Cooling Fan Relay (High) Circuit Malfunction
P1626	Immobilizer Indicator Lamp Circuit Malfunction
P1629	Condenser Fan Relay (High) Circuit-Malfunction
P1630	InterCooler Fan Relay Short/Open Circuit
P1634	Auxiliary Heater Relay short/open circuit
P1634	Auxiliary Heater Relay Short or Open
P1634	Auxiliary Heater Relay short/open circuit
P1635	Water Heater Relay-Malfunction
P1636	Voltage Regulator For Injector
P1638	ECM (Microcontroller) - Malfunction
P1639	ECM (Monitoring ADC) - Malfunction
P1639	ECM (Microcontroller) - Malfunction
P1640	Main Relay Control Circuit Malfunction
P1645	Booster Voltage-Operating Injector
P1646	Booster Voltage-too High
P1647	Booster Voltage-too Low
P1650	Indication lamp circuit malfunction
P1652	Ignition Switch Malfunction
P1653	Error Check After Ignition Off-Malfunction
P1655	Tacho Output Fault
P1660	Cruise Control Multi-Function Input A Circuit
P1661	Cruise Control Indicator Lamp-Malfunction
P1661	Cruise Switch Circuit Low Input
P1661	Cruise Switch Circuit Low Input
P1670	Invalid Injector IQA/C2I
P1671	Injector IQA checksum error
P1672	Cooling Fan Circuit Malfunction
P1673	Fan Relay Malfunction-High Speed
P1674	Immobilizer-Transponder status Error
P1674	Transponder Status Error
P1674	Immobilizer-Transponder status Error
P1674	A/C Condenser Fan Relay-Malfunction
P1674	Immobilizer-Transponder status Error
P1675	Immobilizer-Transponder Programming Error
P1675	Transponder Programming Error
P1676	Immobilizer-Smartra Message Error

Hyundai - Specific Trouble Codes

Trouble code	Fault location
P1676	Smatra Message Error
P1677	Immobilizer-EMS VIN Data Error (EMS has different VIN)
P1678	Immobilizer-EMS No Request (EMS data line open, no immo.)
P1678	EMS No Request (EMS data line open, no immo.)
P1679	Immobilizer-EMS Data Fail (Data frame, CS, Message error)
P1679	EMS Data Fail (Data frame, CS, Message error)
P1690	Immobilizer-Smartra No Response
P1690	Immobilizer-Smartra Error
P1690	Water Heater Relay Fault
P1691	Immobilizer-Antenna Coil Error
P1692	Immobilizer Indicator Lamp Error
P1692	Immobilizer Lamp Error
P1693	Immobilizer-Transponder Error
P1693	Transponder No Response Error_Invalid Response
P1694	Immobilizer-EMS Message Error
P1695	Immobilizer-EMS Memory Error
P1695	Immobilizer-EEPROM Error
P1696	Immobilizer-Authentication Fail
P1696	Immobilizer-Key Mismatched
P1696	Immobilizer - Mismatch/Overtrial Error
P1696	Authentication Fail
P1696	Immobilizer-Authentication Fail
P1697	Immobilizer-Tool Message Error
P1698	Immobilizer-Invalid TP (TP has different PIN)
P1698	Invalid TP (TP has different PIN)
P1698	Key ID not Valid
P1699	Immobilizer-Twice Overtrial
P169A	Immobilizer-SMARTRA Authentication Fail
P169A	Smartra Authentication fail
P1709	Kick Down Servo Switch-Open or Short to Ground
P1710	GND return circuit malfunction
P1717	Steering Wheel Angle Sensor 1-Input Signal
P1718	Steering Wheel Angle Sensor 2-Input Signal
P1719	Steering Wheel Angle Sensor N-Input Signal
P1727	Engine Speed Input Circuit for CVT
P1728	EMC-Open or Short to Battery
P1728	EMC-Open or Short to Battery
P1728	EMC-Open or Short to Battery
P1729	EMC-shorted to ground
P1729	EMC-shorted to ground

Trouble code	Fault location
P1736	Shift Motor-Open or Short to Battery
P1737	Shift Motor-Open or Short to Ground
P1738	Shift System Timeout
P1739	General Position Encoder Fault
P1741	Start (Launch) Clutch Performance/Stuck Off
P1745	4WD ECU Invalid Part Number
P1746	4WD ECU Thermal Threshold Exceeded
P1746	4WD ECU Thermal Threshold Exceeded
P1750	Wheel Speed Sensor Signal (Left Front)
P1751	Wheel Speed Sensor Signal (Right Front)
P1752	Wheel Speed Sensor Signal (Left Rear)
P1753	Wheel Speed Sensor Signal (Right Rear)
P1755	EMC Over Current
P1756	EMC Internal Error
P1757	EMC PWM Out of Range
P1758	Mode Select Switch Fault
P1759	Hubs Control Circuit Fault
P1760	Neutral Condition At R Range
P1766	ECM Signal Malfunction
P1767	Body Sense Algo Cut Off
P1769	Tire Size Fault
P1770	EMC thermal Protection - Lock Mode
P1771	2-4 Brake Failsafe Valve Malfunction
P1771	EMC Thermal Protection - Shutdown
P1772	Low-Reverse Brake Failsafe Valve Malfunction
P1780	Engine Size Failure
P1780	Torque Reduction Request Signal (TCU-ECU)
P1780	Torque Control Signal Failure
P1780	Battery Voltage High
P1780	Torque Control Signal Failure
P1781	Battery Voltage Low
P1782	Invalid Transmission Gear
P1782	Ignition Voltage Fault
P1786	Engine RPM Output Circuit Malfunction
P1815	ESP Auto Recognition Fail
P1841	Start (Launch) Clutch Performance/Stuck Off
P1925	Reverse Lamp Relay
P1929	Shift Lock Solenoid
P1984	U/V/W Phase Open/Short or Hall IC Sensor Error
P1985	OPU ROM - Checksum Error

Trouble code	Fault location
P1986	EOP Relay Error
P2002	Diesel Particulate Filter Efficiency Below Threshold (Bank 1)
P2004	Intake Manifold Runner Control Stuck Open (Bank 1)
P2006	Intake Manifold Runner Control Stuck Closed (Bank 1)
P2009	Intake Manifold Runner Control Circuit Low (Bank 1)
P2010	Intake Manifold Runner Control Circuit High (Bank 1)
P2014	Intake Manifold Runner Position Sensor/Switch Circuit (Bank 1)
P2015	Intake Manifold Runner Position Sensor/Switch Circuit Range/Performance (Bank 1)
P2016	Intake Manifold Runner Position Sensor/Switch Circuit Low (Bank 1)
P2017	Intake Manifold Runner Position Sensor/Switch Circuit High (Bank 1)
P2021	Intake Manifold Runner Valve Position Sensor Circuit Low
P2022	Intake Manifold Runner Valve Position Sensor Circuit High
P2024	Evaporative Emissions Fuel Vapor Temperature Sensor Circuit
P2024	Evaporative Emissions Fuel Vapor Temperature Sensor Circuit
P2030	Exhaust Temperature Value Not Plausible With Sensor 1 And 2
P2031	Exhaust Gas Temperature Sensor Circuit (Bank 1 Sensor 2)
P2032	Exhaust Gas Temperature Sensor Circuit Low (Bank 1/Sensor 2)
P2033	Exhaust Gas Temperature Sensor Circuit High (Bank 1/Sensor 2)
P2034	Exhaust Gas Temperature Sensor Circuit (Bank 1/Sensor 2)
P2065	Fuel Level Sensor “B” Circuit
P2066	Fuel Level Sensor “B” Performance
P2067	Fuel Level Sensor “B” Circuit Low
P2068	Fuel Level Sensor “B” Circuit High
P2069	Fuel Level Sensor “B” Circuit Intermittent
P2070	Intake Manifold Tuning (IMT) Valve Stuck Open (Bank 1)
P2071	Intake Manifold Tuning (IMT) Valve Stuck Closed (Bank 1)
P2075	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit (Bank 1)
P2076	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit Range/Performance (Bank 1)
P2077	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit Low (Bank 1)
P2078	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit High (Bank 1)
P2080	Exhaust Gas Temperature Sensor Circuit Range/Performance (Bank 1/Sensor 1)
P2084	Exhaust Gas Tmperature Sensor Range/Performance-T5
P2096	Post Catalyst Fuel Trim System too Lean (Bank 1)
P2097	Post Catalyst Fuel Trim System too Rich (Bank 1)
P2098	Post Catalyst Fuel Trim System Too Lean (Bank 2)

Hyundai - Specific Trouble Codes

Trouble code	Fault location
P2099	Post Catalyst Fuel Trim System Too Rich (Bank 2)
P2100	Throttle Actuator Control Motor Circuit /Open
P2101	Throttle actuator Control Motor Circuit Range/Performance
P2102	Throttle Actuator Control Motor Circuit Low
P2103	Throttle Actuator Control Motor Circuit High
P2104	Limp Home Mode - Forced Idle
P2104	Throttle Actuator Control System Malfunction-Force Idle
P2105	Throttle Actuator Control System - Forced Engine Shutdown
P2105	Limp Home Mode - Force Engine Shutdown
P2106	Lime Home Mode - Force Limited Power
P2106	Throttle Actuator Control System - Forced Limited Power
P2106	Lime Home Mode - Force Limited Power
P2107	Under Voltage Error For H-bridge
P2110	Throttle Actuator Control System - Forced Limited RPM
P2110	Lime Home Mode - Forced Limited RPM
P2110	Throttle Actuator Control System-Force Limited RPM
P2111	Throttle Actuator Control System - Stuck Open
P2112	Throttle Actuator Control System - Stuck Closed
P2113	Throttle Actuator Control System - Feedback signal Failed
P2118	Throttle Actuator Control Motor Current Range/Performance
P2119	Throttle Actuator Control Throttle Body Range/Performance
P2120	Accelerator Position Sensor 1 Signal Circuit
P2120	Throttle/Pedal Position Sensor/Switch “D” Circuit
P2121	Accelerator Position Sensor 1 Signal Circuit Range/Performance
P2121	Throttle/Pedal Position Sensor/Switch “D” Circuit Range/Performance
P2122	Throttle/Pedal Position Sensor/Switch D Circuit Low Input
P2122	Accelerator Position Sensor 1 Signal Circuit Low Input
P2123	Accelerator Position Sensor 1 Signal Circuit High Input
P2123	Throttle/Pedal Position Sensor /Switch “D” Circuit High Input
P2123	Accelerator Position Sensor 1 Signal Circuit High Input
P2125	Throttle/Pedal Position Sensor/Switch “E” Circuit
P2125	Accelerator Position Sensor 2 Signal Circuit
P2126	Throttle/Pedal Position Sensor/Switch “E” Circuit Range/Performance
P2126	Accelerator Position Sensor 2 Signal Circuit Range/Performance
P2127	Accelerator Position Sensor 2 Signal Circuit Low Input
P2127	Throttle/Pedal Position Sensor/Switch “E” Circuit Low Input
P2128	Throttle/Pedal Position Sensor/Switch “E” Circuit High Input

Trouble code	Fault location
P2128	Accelerator Position Sensor 2 Signal Circuit-High Input
P2135	Throttle Position Sensor 1 & 2 Signal Voltage Correlation
P2135	Throttle/Pedal Position Sensor/Switch A/B Voltage Correlation
P2138	Accelerator Position Sensor 1 & 2 Signal Voltage Correlation
P2138	Throttle/Pedal Position Sensor/Switch D/E Voltage Correlation
P2147	Fuel Injector Group “A” Supply Voltage Circuit Low
P2148	Fuel Injector Group “A” Supply Voltage Circuit High
P2150	Fuel Injector Group “B” Supply Voltage Circuit Low
P2151	Fuel Injector Group “B” Supply Voltage Circuit High
P2153	Fuel Injector Group “C” Supply Voltage Circuit Low
P2154	Fuel Injector Group “C” Supply Voltage Circuit High
P2156	Fuel Injector Group “D” Supply Voltage Circuit Low
P2157	Fuel Injector Group “D” Supply Voltage Circuit High
P2158	Vehicle Speed Sensor “B”
P2159	Vehicle Speed Sensor “B” Range/Performance (Wheel Speed Sensor)
P2160	Vehicle Speed Sensor “B” Circuit Low
P2161	Vehicle Speed Sensor “B” Intermittent/Erratic
P2173	Throttle Actuator Control System- High Air Flow Detected.
P2187	System too Lean at Idle (_Additive) (Bank 1)
P2188	System too Rich at Idle (Bank 1)
P2189	System too Lean at Idle (- Additive) (Bank 2)
P2190	System too Rich at Idle (Bank 2)
P2191	System too Lean at Higher Load (Multiple) (Bank 1)
P2192	System too Rich at Higher Load (Bank 1)
P2193	System Too Lean at Higher Load (_Multiple) (Bank 2)
P2194	System Too Rich at Higher Load (Bank 2)
P2196	O2 Sensor Signal Stuck Rich (Bank 1 Sensor 1)
P2197	O2 Sensor Signal Stuck Lean (Bank 2 Sensor 1)
P2198	O2 Sensor Signal Stuck Rich (Bank 2 Sensor 1)
P2226	Barometric Pressure Circuit
P2227	Barometric Pressure Circuit Range/Performance
P2228	Barometric Pressure Circuit Low Input
P2228	Barometric Pressure Sensor (BPS) -Low Input
P2229	Barometric Pressure Sensor (BPS) -High Input
P2229	Barometric Pressure Circuit High Input
P2231	O2 Sensor Signal Circuit Shorted to Heater Circuit (Bank1 Sensor1)
P2232	O2 Sensor Signal Circuit Shorted to Heater Circuit (Bank1 Sensor2)
P2237	O2 Sensor Pumping Current Circuit/Open (Bank 1 Sensor 1)

Trouble code	Fault location
P2238	O2 Sensor Pumping Current Circuit Low (Bank 1 Sensor 1)
P2239	O2 Sensor Pumping Current Circuit High (Bank 1 Sensor 1)
P2243	O2 Sensor Reference Voltage Circuit/Open (Bank 1 Sensor 1)
P2251	O2 Sensor Reference Ground Circuit/Open (Bank 1 Sensor 1)
P2261	Turbocharger/Supercharger Bypass Valve - Mechanical
P2263	Turbocharger/Supercharger Boost System Performance
P2263	Output Range Error Of VGT Actuator (R Engine)
P2264	Water in Fuel Sensor Circuit
P2264	Detected Water in Fuel Filter
P2269	Water in Fuel Filter Lamp
P2270	O2 Sensor Signal Stuck Lean (Bank 1 Sensor 2)
P2270	O2 Sensor Stuck Lean - Bank1 Sensor 2
P2271	O2 Sensor Signal Stuck Rich (Bank 1 Sensor 2)
P2271	O2 Sensor Stuck Rich - Bank1 Sensor 2
P2271	O2 Sensor Signal Stuck Rich (Bank 1 Sensor 2)
P2272	O2 Sensor Signal Stuck Lean (Bank 2 Sensor 2)
P2272	O2 Sensor Stuck Lean - Bank2 Sensor 2
P2272	O2 Sensor Signal Stuck Lean (Bank 2 Sensor 2)
P2273	O2 Sensor Signal Stuck Rich (Bank 2 Sensor 2)
P2273	O2 Sensor Stuck Rich - Bank2 Sensor 2
P2297	O2 Sensor Out of Range During Deceleration - (Bank 1 Sensor 1)
P2299	Brake Pedal Position/Accelerator Pedal Position Incompatible
P2414	O2 Sensor Exhaust Sample Error (Bank 1 Sensor 1)
P2422	Evaporative Emission System Vent Valve Stuck Closed
P242F	Diesel Particulate Filter Restriction - Ash Accumulation
P2454	CPF differential Pressure Sensor “A” High Input
P2455	CPF Differential Pressure Sensor “A” Low Input
P2501	AMS Voltage Rationality
P2501	Generator Lamp/L-Terminal Circuit High
P2501	AMS Voltage Rationality
P2502	Battery Voltage Rationality
P2502	AMS Charging System Voltage
P2502	Charging System Voltage
P2502	Battery Voltage Rationality
P2502	AMS Charging System Voltage
P2503	AMS No Battery Charge
P2503	Charging System Voltage Low
P2507	ECM/PCM power Input Signal Low
P2563	Error Of VGT Actuator Position Feedback or ECM Control Signal

Hyundai - Specific Trouble Codes

Trouble code	Fault location
P2563	Turbocharger Boost Control Position Sensor “A” Circuit Range/Performance
P2610	ECM/PCM-Engine Off Timer Performance
P2610	ECM/PCM Internal Engine Off Timer Performance
P2626	O2 Sensor Pumping Current Trim Circuit/Open (Bank 1 Sensor 1)
P2637	Torque Management Feedback Signal “A”
P2666	Fuel Shut Off Valve “B” Control Circuit Low
P2667	Fuel Shut Off Valve “B” Control Circuit High
P2700	Transmission Friction Element “A” Apply Time Range/Performance
P2701	Transmission Friction Element “B” Apply Time Range/Performance
P2702	Transmission Friction Element “C” Apply Time Range/Performance
P2703	Transmission Friction Element “D” Apply Time Range/Performance
P2704	Transmission Friction Element “E” Apply Time Range/Performance
P2709	Shift Control Solenoid Valve “F” Electrical
P2716	Pressure Control Solenoid “D” Electrical
P2753	Transmission Fluid Cooler Control Circuit/Open
P2754	Transmission Fluid Cooler Control Circuit Low
P2755	Transmission Fluid Cooler Control Circuit High
P2762	SLU Lineir Feedback Current Stick
P2762	Torque Converter Clutch Control Solenoid Valve Feedback Current Stuck (SLU)
P2763	SLU GND Short/Open
P2763	Torque Converter Clutch Control Solenoid Valve Circuit High (SLU)
P2764	Torque Converter Clutch Control Solenoid Valve Circuit Low (SLU)
P2764	SLU +B Short
P2765	Input/Turbine Speed Sensor “B” Circuit
P2766	Input/Turbine Speed Sensor “B” Circuit Range/Performance
P2769	Torque Converter Clutch Circuit Low
P2770	Torque Converter Clutch Circuit High

B Codes

B1101	Battery Voltage High
B1102	Battery Voltage Low
B1103	Communication Battery Voltage Too Low
B1104	Battery Voltage Out of Range

Trouble code	Fault location
B1105	Reference Voltage Fault
B1106	Alternator ‘L’ voltage
B1107	Alternator “L” Voltage High
B1108	Alternator “L” Voltage Low
B1110	Ignition voltage
B1111	Ignition Voltage High
B1112	Ignition Voltage Low
B1200	Humidity Sensor Open (High)
B1201	Humidity Sensor Short (Low)
B1202	Heater/Engine-Coolant Water Temperature Sensor Open (High)
B1203	Heater Water Temperature Sensor Short
B1204	Air Mix Potentiometer Open (Low) –Passenger
B1205	Air Mix Potentiometer Short (High) –Passenger
B1206	Direction Potentiometer Open (Low) -Passenger
B1207	Direction Potentiometer Short (High) -Passenger
B1208	Intake Potentiometer Open (Low)
B1209	Intake Potentiometer Short (High)
B1210	Front Left Sensor Fault
B1211	Front Center Left Sensor Fault
B1212	Front Center Right Sensor Fault
B1213	Front Right Sensor Fault
B1214	Rear Left Sensor Fault
B1215	Rear Center Left Sensor Fault
B1216	Rear Center Right Sensor Fault
B1217	Rear Right Sensor Fault
B1218	External Control Valve open (Low)
B1219	External Control Valve short (High)
B1220	Vehicle Speed Sensor
B1223	Vehicle Speed Sensor Failure
B1233	In-Car Temperature Sensor Short (Low)
B1234	In-Car Temperature Sensor Open (High)
B1237	Ambient Temperature Sensor Short (Low)
B1238	Ambient Temperature Sensor Open (High)
B1241	Evaporator Sensor Short (Low)
B1242	Evaporator Sensor Open (High)
B1245	Air Mix Potentiometer Open (Low) -Driver
B1246	Air Mix Potentiometer Short (High) -Driver
B1249	Direction Potentiometer Open (Low) -Driver
B1250	Direction Potentiometer Short (High) -Driver
B1257	AQS Sensor Open

Trouble code	Fault location
B1258	AQS Sensor Short
B1259	AQS Sensor Fault
B1260	Air Mix Potentiometer Open (Low) –Console
B1261	Air Mix Potentiometer Short (High) –Console
B1262	Direction Potentiometer Open (Low) -Console
B1263	Direction Potentiometer Short (High) -Console
B1264	Direction Potentiometer Open (Low) -VENT
B1265	Direction Potentiometer Short (High) -VENT
B1266	Direction Potentiometer Open (Low) -Floor
B1267	Direction Potentiometer Short (High) -Floor
B1268	Direction Potentiometer Open (Low) -Defog
B1269	Direction Potentiometer Short (High) -Defog
B1270	Optical Sensor-1 Stuck High
B1271	Optical Sensor-1 Stuck Low
B1272	Optical Sensor-2 Stuck High
B1273	Optical Sensor-2 Stuck Low
B1274	Broken Cable
B1275	Air Mix Potentiometer-VENT Open (Low) –Console
B1276	Air Mix Potentiometer VENT Short (High) –Console
B1277	Air Mix Potentiometer-TEMP Open (Low) –Console
B1278	Air Mix Potentiometer-TEMP Short (High) –Console
B1279	Air Mix Switch Potentiometer Open (Low) –Console
B1279	Air Mix Switch Potentiometer Open (Low) –Console
B1280	Air Mix Switch Potentiometer Short (High) –Console
B1281	Humidity Sensor Short (Low) – AUTO Defog
B1282	Humidity Sensor Open (High) - AUTO Defog
B1283	Direction Potentiometer Open (Low) - AUTO Defog
B1284	Direction Potentiometer Short (High) - Auto Defog
B1285	Direction Control Motor -AUTO Defog
B1286	Duct sensor short (Low) - Vent
B1287	Duct sensor open (High) - Vent
B1288	Duct sensor short (Low) - Floor
B1289	Duct sensor open (High) - Floor
B1300	Steering angle signal Implasible
B1301	Steering angle signal fault
B1302	Gearbox Signal Fault-CAN Signal
B1303	Accelerator Pedal Position Signal Error
B1304	Engine state signal fault
B1305	Yaw Rate Sensor Signal Fault
B1306	Brake pedal signal fault
B1307	Air suspension ECU sensor signal invalid

Hyundai - Specific Trouble Codes

Trouble code	Fault location
B1319	Required Weight Check
B1320	WCS (Weight Classification System) communication line short to Ground
B1321	WCS (Weight Classification System) short to Battery or No Response
B1322	WCS (Weight Classification System) ECU Defect
B1323	WCS (Weight Classification System) Sensor Mat Defect
B1324	WCS (Weight Classification System) Communication Error
B1325	WCS (Weight Classification System) Wrong ID
B1326	FIS (Front Impact Sensor) -Driver Short to Ground
B1327	FIS (Front Impact Sensor) -Driver Short to Battery
B1328	FIS (Front Impact Sensor) -Driver Defect
B1329	FIS (Front Impact Sensor) -Driver Communication error
B1330	FIS (Front Impact Sensor) -Driver Wrong ID
B1331	FIS (Front Impact Sensor) -Passenger Short to Ground
B1332	FIS (Front Impact Sensor) -Passenger Short to Battery
B1333	FIS (Front Impact Sensor) -Passenger Defect
B1334	FIS (Front Impact Sensor) -Passenger Communication error
B1335	FIS (Front Impact Sensor) -Passenger Wrong ID
B1336	FIS (Front Impact Sensor) -Center Short to Ground
B1337	FIS (Front Impact Sensor) -Center Short to Battery
B1338	FIS (Front Impact Sensor) -Center Defect
B1339	FIS (Front Impact Sensor) -Center Communication error
B1340	FIS (Front Impact Sensor) -Center Wrong ID
B1341	Remote Crash Sensors Cross Coupling
B1342	Passive Sensors Cross Coupling
B1344	ODS ECU Defect
B1345	Driver Airbag open
B1346	Driver Airbag Resistance too High (1st stage)
B1347	Driver Airbag Resistance too Low (1st stage)
B1348	Driver Airbag resistance circuit short to Ground (1st stage)
B1349	Driver Airbag resistance circuit short to Battery (1st stage)
B1351	Passenger Airbag Open
B1352	Passenger Airbag Resistance too High (1st Stage)
B1353	Passenger Airbag Resistance too Low (1st stage)
B1354	Passenger Airbag Resistance Circuit Short to Ground (1st Stage)
B1355	Passenger Airbag Resistance Circuit Short to Battery (1st Stage)
B1356	Rear airbag resistance too Low
B1357	Rear airbag resistance too High
B1358	Rear airbag resistance circuit short to Ground
B1359	Rear airbag resistance circuit short to Battery
B1360	Pretensioner front-Driver Open
B1361	Pretensioner Front-Driver Resistance too High
B1362	Pretensioner Front-Driver Resistance too Low
B1363	Pretensioner front-Driver resistance circuit short to Ground
B1364	Pretensioner front-Driver resistance circuit short to Battery
B1366	Pretensioner Front-Passenger Open
B1367	Pretensioner Front-Passenger Resistance too High
B1368	Pretensioner Front-Passenger Resistance too Low
B1369	Pretensioner Front-Passenger Resistance Circuit Short to Ground
B1370	Pretensioner Front-Passenger Resistance Circuit Short to Battery
B1371	STPS (Seat Track Position Sensor) -Driver instability
B1372	STPS (Seat Track Position Sensor) -Passenger Instability
B1377	Side Airbag Front-Driver open
B1378	Side Airbag Front-Driver Resistance too High
B1379	Side Airbag Front-Driver Resistance too Low
B1380	Side Airbag Front-Driver Resistance Circuit Short to Ground
B1381	Side Airbag Front-Driver Resistance Circuit Short to Battery
B1382	Side Airbag Front-Passenger Resistance too High
B1383	Side Airbag Front-Passenger Resistance too Low
B1384	Side Airbag Front-Passenger Resistance Circuit Short to Ground
B1385	Side Airbag Front-Passenger Resistance Circuit Short to Battery
B1386	Side Airbag Front-Passenger open
B1387	STPS (Seat Track Position Sensor) -Driver Short or Short to Ground
B1388	STPS (Seat Track Position Sensor) -Driver Open or Short to Battery
B1389	STPS (Seat Track Position Sensor) -Driver Defect
B1390	STPS (Seat Track Position Sensor) -Passenger Short or Short to Ground
B1391	STPS (Seat Track Position Sensor) -Passenger Open or Short to Battery
B1392	STPS (Seat Track Position Sensor) -Passenger Defect
B1393	Empty seat Re-zero failure
B1394	Clear all existing PODS faults failure
B1395	External Device Cross-Couplings
B1396	STPS (Seat Track Position Sensor) -Driver Open or Short to Ground
B1397	STPS (Seat Track Position Sensor) -Driver Short or Short to Battery
B1398	STPS (Seat Track Position Sensor) -Passenger Open or Short to Ground
B1399	STPS (Seat Track Position Sensor) -Passenger Short or Short to Battery
B1400	SIS (Side Impact Sensor) Front-Driver defect
B1401	SIS (Side Impact Sensor) Front-Driver Circuit Short to Ground
B1402	SIS (Side Impact Sensor) Front-Driver Circuit Short to Battery
B1403	SIS (Side Impact Sensor) Front-Passenger Defect
B1404	SIS (Side Impact Sensor) Front-Passenger Circuit Short to Ground
B1405	SIS (Side Impact Sensor) Front-Passenger Circuit Short to Battery
B1406	PPD (Passenger Presence Detection system) front-Passenger defect
B1407	PPD (Passenger Presence Detection system) front-Passenger communication error
B1409	SIS (Side Impact Sensor) Front-Driver Communication Error
B1410	SIS (Side Impact Sensor) Front-Passenger Communication Error
B1412	SIS (Side Impact Sensor) Rear-Driver Communication error
B1413	SIS (Side Impact Sensor) Rear-Passenger Communication error
B1414	SIS (Side Impact Sensor) Front-Driver Wrong ID
B1415	SIS (Side Impact Sensor) Front-Passenger Wrong ID
B1416	SIS (Side Impact Sensor) Rear-Driver Wrong ID
B1417	SIS (Side Impact Sensor) Rear-Passenger Wrong ID
B1418	SIS (Side Impact Sensor) Rear-Driver Defect
B1419	SIS (Side Impact Sensor) Rear-Passenger Defect
B1421	Rear airbag Driver resistance too High
B1422	Rear airbag Driver resistance too Low
B1423	Rear airbag Driver circuit short to Ground
B1424	Rear airbag Driver circuit short to Battery
B1425	Rear airbag Passenger resistance too High
B1426	Rear airbag Passenger resistance too Low
B1427	Rear airbag Passenger circuit short to Ground
B1428	Rear airbag Passenger circuit short to Battery
B1429	Side Airbag Rear-Driver Resistance too High
B1430	Side Airbag Rear-Driver Resistance too Low
B1431	Side Airbag Rear-Driver Resistance Circuit Short to Ground
B1432	Side Airbag Rear-Driver Resistance Circuit Short to Battery

Hyundai - Specific Trouble Codes

Trouble code	Fault location
B1433	Side Airbag Rear-Passenger Resistance too High
B1434	Side Airbag Rear-Passenger Resistance too Low
B1435	Side Airbag Rear-Passenger Resistance Circuit Short to Ground
B1436	Side Airbag Rear-Passenger Resistance Circuit Short to Battery
B1440	OC (Occupant Classification) Communication Line Short to Ground
B1441	OC (Occupant Classification) -Driver Short to Battery or No Response
B1442	OC (Occupant Classification) -Driver ECU Defect
B1443	OC (Occupant Classification) -Driver Sensor Mat Defect
B1444	OC (Occupant Classification) -Driver Communication Error
B1445	OC (Occupant Classification) -Driver Wrong ID
B1446	OC (Occupant Classification) -Passenger Short to Battery or No Response
B1447	OC (Occupant Classification) -Passenger ECU Defect
B1448	OC (Occupant Classification) -Passenger Sensor Mat Defect
B1449	OC (Occupant Classification) -Passenger Communication Error
B1450	OC (Occupant Classification) -Passenger Wrong ID
B1451	SIS (Side Impact Sensor) rear-Driver Circuit Short to Ground
B1452	SIS (Side Impact Sensor) Rear-Driver Circuit Short to Battery
B1454	SIS (Side Impact Sensor) Rear-Passenger Circuit Short to Ground
B1455	SIS (Side Impact Sensor) Rear-Passenger Circuit Short to Battery
B1461	Front PPD (Passenger Presence Detection system) short
B1462	Front PPD (Passenger Presence Detection system) open
B1463	Front PPD (Passenger Presence Detection system) short to Ground
B1464	Front PPD (Passenger Presence Detection system) short to Battery
B1465	PPD (Passenger Presence Detection system) rear-Driver short
B1466	PPD (Passenger Presence Detection system) rear-Driver open
B1467	PPD (Passenger Presence Detection system) rear-Drvier short to Ground
B1468	PPD (Passenger Presence Detection system) rear-Driver short to Battery
B1469	PPD (Passenger Presence Detection system) rear-Passenger short
B1470	PPD (Passenger Presence Detection system) rear-Passenger open

Trouble code	Fault location
B1471	PPD (Passenger Presence Detection system) rear-Passenger short to Ground
B1472	PPD (Passenger Presence Detection system) rear-Passenger short to Battery
B1473	Inflatable Curtain Airbag Front-Driver Resistance too High
B1474	Inflatable Curtain Airbag Front-Driver Resistance too Low
B1475	Inflatable Curtain Airbag Front-Driver Resistance Circuit Short to Ground
B1476	Inflatable Curtain Airbag Front-Driver Resistance Circuit Short to Battery
B1477	Inflatable Curtain Airbag Front-Passenger Resistance too High
B1478	Inflatable Curtain Airbag Front-Passenger Resistance too Low
B1479	Inflatable Curtain Airbag Front-Passenger Resistance Circuit Short to Ground
B1480	Inflatable Curtain Airbag Front-Passenger Resistance Circuit Short to Battery
B1481	Driver Airbag Resistance too High (2nd stage)
B1482	Driver Airbag Resistance too Low (2nd stage)
B1483	Driver Airbag Resistance Circuit Short to Ground (2nd stage)
B1484	Driver Airbag Resistance Circuit Short to Battery (2nd stage)
B1485	Passenger Airbag Resistance too High (2nd stage)
B1486	Passenger Airbag Resistance too Low (2nd stage)
B1487	Passenger Airbag Resistance Circuit Short to Ground (2nd stage)
B1488	Passenger Airbag Resistance Circuit Short to Battery (2nd stage)
B1489	PODS (Passenger Occupant Detecting System) ECU Defect
B1490	PODS (Passenger Occupant Detecting System) Sensor (Bladder) Defect
B1491	PODS (Passenger Occupant Detecting System) ECU supply voltage too Low
B1492	PODS (Passenger Occupant Detecting System) short to Battery
B1493	PODS (Passenger Occupant Detecting System) Communication error
B1494	PODS (Passenger Occupant Detecting System) Wrong ID
B1495	BTS (Belt-Tension Sensor) Defect
B1496	PODS (Passenger Occupant Detecting System) Not calibrated
B1508	TRUNK LID SWITCH Error
B1509	Push Switch Error
B1511	Buckle Switch Driver open or short to Battery
B1512	Buckle Switch Driver short or short to Ground
B1513	Buckle Switch Passenger open or short to Battery
B1514	Buckle Switch Passenger short or short to Ground

Trouble code	Fault location
B1515	Buckle Switch Driver Defect
B1516	Buckle Switch Passenger Defect
B1517	Buckle Switch Driver Instability
B1518	Buckle Switch Passenger instability
B1521	Buckle Switch Driver Short or Short to Battery
B1522	Buckle Switch Driver Open or Short to Ground
B1523	Buckle Switch Passenger short or short to Battery
B1524	Buckle Switch Passenger Open or Short to Ground
B1527	Passenger airbag On/Off switch open or short to Battery
B1528	Passenger airbag On/Off switch short or short to Ground
B1529	Passenger airbag On/Off switch defect
B1530	Passenger airbag On/Off switch instability
B1550	Cruise Switch Error
B1551	Audio1 Switch Error
B1552	Audio2 Switch Error
B1553	Light Multifunction Switch Error
B1554	Turn Signal Multifunction Switch Error
B1555	Wiper Multifunction Switch Error
B1562	Fuel Sender ERR
B1580	Ignition start switch short to battery
B1581	Ignition Switch Error
B1582	Push Knob Switch Error
B1583	Park Position Error
B1585	Latch Switch Fail
B1586	Chime Open or Short to Battery
B1587	Chime Short to Ground
B1588	Right Front Wiper/Washer MF Switch
B1589	Right Rear Wiper/Washer MF Switch
B1590	Light Multifunction Switch Error
B1591	Turn Signal Multifunction Switch Error
B1592	Head lamp Switch Fault
B1593	Switch Lamp
B1593	Sector SW Fault
B1594	Trunk Inner Push Button Switch
B1595	Trunk O/S HDL Switch
B1596	Door Trim Close Switch
B1602	CAN Error
B1603	CAN Communication Bus Off
B1603	CAN Bus Off
B1604	CAN Timeout between SMK and (IPM or BCM)

Hyundai - Specific Trouble Codes

Trouble code	Fault location
B1605	CAN Timeout Between SMK and DDM
B1606	CAN Timeout Between SMK and ADM
B1607	CAN Time-out Between BCM and PSM
B1608	CAN Time-out Between BCM and SCM
B1609	CAN Timeout between SMK and BCM
B1609	Lost Communication Between BCM and SMK
B1609	CAN timeout between IPM and SMK
B1609	CAN Timeout between SMK and BCM
B1611	FAM Communication Lost and BUS Failure
B1611	CAN Time-out FAM
B1612	CAN Timeout between SMK and RAM
B1612	RAM Communication Lost & Bus Failure
B1613	CAN timeout between IPM and CLU
B1613	Lost Communication with CLU
B1613	CAN Time-out CLU
B1614	Lost Communication Between BCM and IFU
B1614	CAN Timeout Between BCM and IFU
B1615	Data out to basestation short to Ground or open circuit
B1616	Data out to basestation short to Battery
B1617	Data in from basestation short to Ground
B1618	Data in from basestation disconnected
B1619	Basestation antenna failed
B1619	Antenna Failure at the Immo Coil has been Selected
B1619	Basestation antenna failed
B1620	Internal fault-Replace SRSCM
B1621	SRSCM Hardware Fault
B1621	PTL ECU Error
B1621	Sensor Power Error Line ERROR
B1621	SRSCM Hardware Fault
B1622	SRSCM software fault
B1622	ECU Software Error
B1623	SRSCM error or wrong checksum
B1624	EEPROM Failure
B1625	ECM Communication Data Failure
B1625	ECM Reception error or ECM data error
B1626	No ECM Request
B1626	No SRSCM request
B1627	EEPROM Corruption
B1628	Module Configuration Conflict
B1629	Lin Reception Error

Trouble code	Fault location
B1630	CAN Communication Bus Off
B1630	Lin Transmission Error
B1630	LIN error
B1636	LIN Communication Error Fault
B1637	System Not Initialized
B1638	CAN time-out Air Suspension
B1639	LIN communication error DBL left
B1640	CAN Time-out MFSW
B1640	LIN communication error DBL right
B1640	CAN Time-out MFSW
B1641	CAN Time-out FBWS
B1641	LIN communication error LWR left
B1642	CAN Time-out PTM
B1642	LIN communication error LWR right
B1643	CAN Time-out ECW
B1644	CAN time-out ACU
B1644	CAN timeout between IPM and PDM
B1645	Drive Unit Fail
B1646	S/W Rescue Mode
B1647	VAS Error
B1649	Crash recorded - Rollover event (Replace ECU)
B1650	Crash Recorded in 1st Stage Only (Frontal-Replace SRSCM)
B1651	Crash Recorded in Front-Driver Side Airbag (Replace SRSCM)
B1652	Crash Recorded in Front-Passenger Side Airbag (Replace SRSCM)
B1653	Crash recorded in rear-Driver side airbag (Replace SRSCM)
B1654	Crash recorded in rear-Passenger side airbag (Replace SRSCM)
B1655	Crash recorded (Side - Replace SRSCM)
B1656	Fault Memory Full
B1657	Crash Recorded in Belt Pretensioner only
B1658	Belt Pretensioner 6 times Deployment
B1659	Rear Crash Detected
B1660	Crash recorded in Driver Airbag (Replace SRSCM)
B1661	Parameter Fault And Missing
B1662	Crash recorded in Driver belt Pretensioner
B1663	Crash recorded in Passenger Airbag (Replace SRSCM)
B1664	Crash recorded in Passenger belt pretensioner
B1670	Crash recorded in full stage (Frontal-Replace SRSCM)
B1671	DDM and IMS SERIAL COMMUNICATION ERROR

Trouble code	Fault location
B1672	APT Sensor Fault – CAN Signal
B1675	Crash Output error
B1676	Crash Output Short to Ground
B1677	Crash Output short to Battery
B1678	Scrap Recorded (Replace ECU)
B1681	Lost Communication Between BCM and PDM
B1681	DDM and Rear LH Serial Communication Error
B1683	Exceed Maximum Coding Number
B1684	ACU Configuration is different
B1685	Engine RPM fault – CAN Signal
B1686	Vehicle Speed Sensor Fault – CAN Signal
B1687	Engine Coolant Temperature Sensor Circuit - CAN Signal
B1688	Cluster Ionizer Fault
B1689	CAN Time-out PDM
B1689	CAN Timeout Between SMK and PDM
B1690	CAN timeout between IPM and SJB
B1691	D/CLOCK Reference high
B1692	D/CLOCK Reference low
B1693	Ambient temperature sensor fault (D/CLOCK Only)
B1694	Ambient temperature sensor open/short (D/CLOCK Only)
B1700	Buckle pretensioner - Driver open
B1701	Buckle Pretensioner-Driver resistance too High
B1702	Buckle Pretensioner-Driver resistance too Low
B1703	Buckle Pretensioner-Driver resistance circuit short to Ground
B1704	Buckle Pretensioner-Driver resistance circuit short to Battery
B1705	Buckle pretensioner - Passenger open
B1706	Buckle Pretensioner-Passenger resistance too High
B1707	Buckle Pretensioner-Passenger resistance too Low
B1708	Buckle Pretensioner-Passenger resistance circuit short to Ground
B1709	Buckle Pretensioner-Passenger resistance circuit short to Battery
B1710	Knee airbag – Driver open
B1711	Knee airbag – Driver resistance too High
B1712	Knee airbag – Driver resistance too Low
B1713	Knee airbag – Driver resistance circuit short to Ground
B1714	Knee airbag – Driver resistance circuit short to Battery
B1715	Knee airbag – Passenger open
B1716	Knee airbag – Passenger resistance too High
B1717	Knee airbag – Passenger resistance too Low
B1718	Knee airbag – Passenger resistance circuit short to Ground

Hyundai - Specific Trouble Codes

Trouble code	Fault location
B1719	Knee airbag – Passenger resistance circuit short to Battery
B1722	Inflatable curtain airbag rear-Driver resistance too High
B1723	Inflatable curtain airbag rear-Driver resistance too Low
B1724	Inflatable curtain airbag rear-Driver resistance circuit short to Ground
B1725	Inflatable curtain airbag rear-Driver resistance circuit short to Battery
B1726	Inflatable curtain airbag rear-Passenger resistance too High
B1727	Inflatable curtain airbag rear-Passenger resistance too Low
B1728	Inflatable curtain airbag rear-Passenger resistance circuit short to Ground
B1729	Inflatable curtain airbag rear-Passenger resistance circuit short to Battery
B1730	Anchor Pretensioner front-Driver resistance too High
B1731	Anchor Pretensioner front-Driver resistance too Low
B1732	Anchor Pretensioner front-Driver resistance circuit short to Ground
B1733	Anchor Pretensioner front-Driver resistance circuit short to Battery
B1734	Anchor Pretensioner front-Passenger resistance too High
B1735	Anchor Pretensioner front-Passenger resistance too Low
B1736	Anchor Pretensioner front-Passenger resistance circuit short to Ground
B1737	Anchor Pretensioner front-Passenger resistance circuit short to Battery
B1738	P-SIS front - Driver wrong ID
B1739	P-SIS Front-Driver Defect
B1740	P-SIS Front-Driver Short to Ground
B1741	P-SIS Front-Driver Short to Battery
B1742	P-SIS Front-Driver Communication Error
B1744	P-SIS front - Passenger wrong ID
B1745	P-SIS Front-Passenger Defect
B1746	P-SIS Front-Passenger Short to Ground
B1747	P-SIS Front Passenger Short to Battery
B1748	P-SIS Front-Passenger Communication Error
B1762	ACU Coding Error
B1763	Body Sense ECU Defect
B1764	Body Sense MAT Defect
B1765	Body Sense Communication Error
B1766	Body Sense Wrong ID
B1767	Body Sense Algo Cut Off
B1768	Rear In-Car Temperature Sensor Short (Low)
B1769	Rear In-Car Temperature Sensor Open (High)
B1770	Sensor Power Voltage ERROR
B1901	VA sunlight out of range
B1905	Rain Sensor Fault 1
B1905	Sensor Power Supply Fault
B1906	Rain Sensor Fault 2
B1906	Front sensor PWM signal fault
B1907	Rain Sensor Fault 3
B1907	Front sensor signal fault
B1909	Rear sensor signal fault
B1910	Outside Mirror - Left Horizontal Motor or Sensor Error
B1911	Outside Mirror - Left Vertical Motor or Sensor Error
B1912	Outside Mirror - Right horizontal Motor or Sensor
B1912	RIGHT OSM Horizotal Sensor ERROR
B1912	Outside Mirror - Right horizontal Motor or Sensor
B1913	Outside Mirror - Right vertical Motor or Sensor
B1913	RIGHT OSM Vertical Sensor ERROR
B1952	Outside Mirror Defogger Error
B1954	Slide Motor Or Sensor Error
B1955	Recline Motor Or Sensor Error
B1956	Front Height Motor Or Sensor Error
B1957	Rear Height Motor Or Sensor Error
B1957	Right Rear Height Motor Or Sensor Error
B1958	Pedal Motor Sensor Error
B1959	Tilt Position Sensor Error
B1960	Telescope Motor or Sensor Error
B1960	Tele Position Sensor Error
B1960	Right Rear Height Position Sensor Error
B1961	Inside Mirror Horizontal Motor or Sensor Error
B1962	Inside Mirror Vertical Motor or Sensor Error
B1968	FR DOOR BUTTON Error
B1971	Parking Position Input Error
B1972	Start Stop Button Failure
B1978	Electric Steering Column Lock Failure
B1979	ESCL not unlocked
B1980	ESCL not locked
B1981	Inconsistency between (Cluster) C_VehicleSpeed and C_VS_ABS
B1982	Emergency stop
B1987	Sub Micom Failed
B1987	Sub MCU Failed
B1988	ESCL BAT SCB
B1988	ESCL Battery Short Circuit To Battery
B1989	ESCL GND SCB
B1989	ESCL Ground Short Circuit To Battery
B1990	ESCL Battery Short Circuit To Ground
B1991	Immobilizer TX Short Circuit To Ground
B1992	Hall Sensor A Fault
B1993	Hall Sensor B Fault
B1994	Touch Sensor RH Fault
B1995	Touch Sensor LH Fault
B1996	Headrest Auto Adjust Error
B2115	Rear Defog Relay Fail
B2119	Windshield Defog Relay Fail
B2325	Swivel module fault left
B2326	Swivel module fault right
B2330	Driver Door Lock Actuator Error
B2331	Driver Door Unlock Actuator Error
B2332	Assistant Door Lock Actuator Error
B2333	Assistant Door Unlock Actuator Error
B2400	Levelling motor fault left
B2401	Levelling motor fault right
B2405	Air Mix Motor-Console
B2406	Air Mix Motor-Driver
B2408	Intake Motor
B2409	Direction Control Motor-Driver
B2411	Direction Control Motor-Console
B2415	Air Mix Door Motor-Passenger
B2416	Direction Control Motor-Passenger
B2417	Direction Control Motor-Vent
B2418	Direction Control Motor-Floor
B2419	Direction Control Motor-Defog
B2420	Drive Motor Open
B2421	Drive Motor Short High
B2422	Drive Motor Short Low
B2423	Clutch Open or Short High
B2423	Clutch Fault
B2423	Clutch Open or Short High
B2424	Clutch Short Low
B2425	Pinch Strip Open/Stuck High

Hyundai - Specific Trouble Codes

Trouble code	Fault location
B2426	Pinch Strip Stuck Low
B2427	Right Pinch Strip Open/Stuck High
B2428	Right Pinch Strip Stuck Low
B2441	Right Rear Wiper Park Position Detect Fail
B2447	Air Mix Motor VENT-Console
B2450	Unlatch or Cinch Motor Short High
B2451	Unlatch Motor Short Low
B2451	Unlatch or Cinch Motor Short Low
B2452	Unlatch or Cinch Motor Open
B2452	Cinching Latch Motor Fault
B2456	Seat Motor Sensor VCC Error
B2457	Pedal Motor Sensor VCC Error
B2458	Power Striker Motor and Switch Error
B2459	Full Latch SW Fault
B2459	Latch Switch Fail
B2459	Latch Motor and Switch Error
B2460	PTG Motor Fault
B2460	Drive Motor and Hall Sensor Error
B2500	Warning lamp Failure
B2501	Warning lamp open
B2502	Passenger Airbag Telltale Lamp Failure
B2503	Warning Lamp Open or Short to Ground
B2504	Warning Lamp Short or Short to Battery
B2505	Passenger Airbag on/off Warning Lamp Failure
B2506	Passenger airbag Telltale lamp Circuit open
B2507	Passenger airbag Telltale lamp Circuit open or short to ground
B2508	Passenger airbag Telltale lamp Circuit short or short to battery
B2510	Right Headlamp High Circuit Short to Ground
B2511	Left Headlamp High Circuit Short to Ground
B2512	Right Headlamp Low Circuit Short to Ground
B2513	Left Headlamp Low Circuit Short to Ground
B2514	External Tail Lamp RH Circuit Short to Ground
B2515	External Tail Lamp LH Circuit Short to Ground
B2516	Front Fog Lamp Circuit Short to Ground
B2517	Internal Tail Lamp Circuit Short to Ground
B2518	Turn Signal LH Front Open Circuit
B2519	Turn Signal LH Rear Open Circuit
B2520	Turn Signal RH Front Open Circuit
B2521	Turn Signal RH Rear Open Circuit
B2521	Brake Circuit Open or Fuse Fail

Trouble code	Fault location
B2522	Turn Signal LH Front Circuit Short to Gtound
B2523	Turn Signal LH Rear Circuit Short to Gtound
B2524	Brake Lamp Open
B2524	Turn Signal RH Front Circuit Short to Gtound
B2525	Illumination Error
B2525	Turn Signal RH Rear Circuit Short to Gtound
B2529	Driver Door Courtesy Lamp Error
B2533	Assistant Door Courtesy Lamp Error
B2535	Right Turn Signal Lamp Short to Ground
B2537	Right Turn Signal Lamp Open
B2539	Left Turn Signal Lamp Short to Ground
B2541	Left Turn Signal Lamp Open
B2543	Right Head Lamp (Low Beam) Short to Ground
B2545	Right Head Lamp (High Beam) Circuit Open
B2547	Left Headlamp (High Beam) Short to Ground
B2549	Left Headlamp (High Beam) Open
B2551	Right Head Lamp (Low Beam) Short to Ground
B2553	Right Head Lamp (Low Beam) Circuit Open
B2555	Left Headlamp (Low Beam) Short to Ground
B2557	Left Headlamp (Low Beam) Open
B2559	Right Front Fog Lamp Short to Ground
B2561	Right Front Fog Lamp Open
B2563	Left Front Fog Lamp Circuit Short to Ground
B2565	Left Front Fog Lamp Open
B2567	Rear Fog Lamp Short to Ground
B2569	Rear Fog Lamp Open
B2571	Right Park Lamp Short to Ground
B2573	Right Park Lamp Open
B2575	Left Park Lamp Short to Ground
B2577	Left Park Lamp Open
B2579	Right Rear Tail Marker Lamp Short to Ground
B2581	Right Rear Tail Marker Lamp Open
B2583	Left Rear Tail Marker Lamp Short to Ground
B2585	Left Rear Tail Marker Lamp Open
B2587	Back Up Lamp Short to Ground
B2589	Back Up Lamp Open
B2598	Right Rear Blower Switch Illumination Circuit Open
B2599	Right Rear Blower Switch Illumination Circuit Short to Ground

C Codes

Trouble code	Fault location
C1001	EPS ECU Checksum/Watchdog Error
C1011	Battery Voltage Low
C1012	Vehicle Speed Sensor “A” Range/Performance
C1012	Vehicle Speed Sensor Malfunction
C1014	Lamp Circuit Open or Short
C1017	EPS Solenoid Valve Failure
C1017	Solenoid Malfunction
C1101	TCS5 message timeout
C1101	Battery Voltage High
C1102	ESP2 message timeout
C1102	Battery Voltage Low
C1103	SAS1 message timeout
C1103	Battery Voltage Out of Range
C1103	Ignition Signal Failure
C1103	Ignition Voltage Fault
C1103	SAS1 message timeout
C1104	Ignition Voltage High
C1104	EMS2 message timeout
C1104	Ignition Voltage High
C1105	TCU1 message timeout
C1105	Ignition Voltage Low
C1106	CLU2 message timeout
C1106	Alternator “L” Terminal Voltage
C1107	Alternator “L” Voltage High
C1107	TCS1 message timeout
C1108	Alternator “L” Voltage Low
C1109	LDWS1 message timeout
C1109	Ignition Open
C110A	ACU1 message timeout
C110B	SCC3 message timeout
C1112	Sensor Source Voltage
C1112	Sensor Supply Voltage Error
C1121	Sensor 1, Front Left Sensor Battery Voltage Low
C1121	Front Left Sensor Battery Voltage Low
C1121	Sensor 1 Battery Voltage Low
C1122	Front Right Sensor Battery Voltage Low
C1122	Sensor 2, Front Right Sensor Battery Voltage Low
C1122	Sensor 2 Battery Voltage Low

Hyundai - Specific Trouble Codes

Trouble code	Fault location
C1123	Rear Left Sensor Battery Voltage Low
C1123	Sensor 3, Rear Left Sensor Battery Voltage Low
C1123	Sensor 3 Battery Voltage Low
C1124	Rear Right Sensor Battery Voltage Low
C1124	Sensor 4, Rear Right Sensor Battery Voltage Low
C1124	Sensor 4 Battery Voltage Low
C1125	Sensor 5 Battery Voltage Low
C1125	Spare Wheel Sensor Battery Voltage Low
C1125	Spare Sensor Battery Low
C1126	Undervoltage
C1126	TPMS ECU Battery Voltage Low
C1127	Overvoltage
C1127	TPMS ECU Battery Voltage High
C1128	PAS Front Sensor source Voltage
C1129	PAS Rear Sensor Source Voltage
C1200	Wheel Speed Sensor Front-LH Open/Short
C1201	Wheel Speed Sensor Front-LH Range/Performance/Intermittent
C1202	Wheel Speed Sensor Front-LH Invalid/no Signal
C1203	Wheel Speed Sensor Front-RH Open/Short
C1204	Wheel Speed Sensor Front-RH Range/Performance/Intermittent
C1205	Wheel Speed Sensor Front-RH Invalid/no Signal
C1206	Wheel Speed Sensor Rear-LH Open/Short
C1207	Wheel Speed Sensor Rear-LH Range/Performance/Intermittent
C1208	Wheel Speed Sensor Rear-LH Invalid/no Signal
C1209	Wheel Speed Sensor Rear-RH Open/Short
C1210	LDWS System State Not valid
C1210	Wheel Speed Sensor Rear-RH Range/Performance/Intermittent
C1211	Signal Passenger Buckled Input State not valid
C1211	Wheel Speed Sensor Rear-RH Invalid/no Signal
C1212	Vehicle Speed Sensor
C1212	First Speed Input Fault
C1212	Signal Driver Buckled Input State not valid
C1212	Vehicle Speed Sensor Failure
C1212	Vehicle Speed Sensor Fail
C1212	Vehicle Speed Sensor “A”
C1213	Seat_belt_Driver (0x690) and Driver Buckled Input State (0x5A) not plausible
C1213	Wheel Speed Frequency Error (Generic Wheel Speed Error)
C1213	Wheel Speed Frequency Error
C1214	Seat_belt_Passenger (0x690) and Passenger Buckled Input State (0x5A) not plausible
C1219	Throttle Position Sensor
C1220	Signal WHEEL_FL or WHEEL_FR or WHEEL_RL or WHEEL_RR not Valid
C1230	Primary Pressure Sensor-Signal
C1230	Signal Yaw Rate or Acceleration AX or Acceleration AY or Brakepressure State not valid
C1230	Pressure sensor
C1235	Primary Pressure Sensor-Electrical
C1235	Primary Pressure Sensor (Master Cylinder) -Electrical
C1237	Primary Pressure Sensor (Master Cylinder) -Signal
C1237	Primary Pressure Sensor-Signal
C1240	Signal SAS_Angle not Valid or Signal SAS MsgCount or Checksum not Correct
C1240	Second Speed Input Fault
C1241	Force Sensor Failure
C1242	Force Sensor Not Calibrated
C1243	Height Sensor - Front Left
C1246	Height Sensor Supply Voltage Failure - LH
C1247	Height Sensor - Front Right
C1249	Front Height Sensor
C1250	Height Sensor Supply Voltage Failure - RH
C1251	Height Sensor - Rear Left
C1255	Height Sensor - Rear Right
C1255	Height sensor range over
C1255	Rear Height Sensor
C1255	Height Sensor - Rear Right
C1257	Height sensor output short to BAT/GND or line open
C1259	Steering Angle Sensor-Electrical
C1259	Steering Angle Sensor – Electrical Malfunction
C1260	Steering angle sensor-signal
C1260	Steering Angle Sensor Circuit-Signal
C1260	Internal Signal not Plausible
C1261	Steering Angle Sensor is not Calibrated
C1262	Temperature Sensor Failure
C1270	Temperature/Overload
C1272	Engine Speed Signal
C1272	Engine Speed Signal
C1274	Longitudinal G sensor open/short
C1274	Longitudinal G Sensor-Electrical
C1275	Longitudinal G sensor Signal Fail
C1275	Longitudinal G Sensor Range/Performance error
C1278	Acceleration Sensor Front-LH Malfunction
C1278	G - Sensor (Front Left)
C1278	G-SENSOR (FL)
C1279	Acceleration Sensor Front-RH Malfunction
C1279	G-SENSOR (FR)
C1279	G - Sensor (Front Right)
C1281	G - Sensor (Rear)
C1281	Acceleration sensor Rear-RH Malfunction
C1281	G - Sensor (Rear)
C1281	Acceleration Sensor Rear
C1282	Yaw Rate & Lateral G Sensor-Electrical
C1283	Lateral G sensor /Longitudinal G sensor/ yaw rate sensor: signal error
C1284	Acceleration Sensor Voltage Failure
C1284	G - Sensor Voltage Failure
C1285	Longitudinal G Sensor Not Calibrated
C1290	Torque sensor main signal fail
C1290	Torque Sensor Signal Fail
C1290	Torque sensor main signal fail
C1291	Torque Sensor Sub Signal Fail
C1292	Torque Sensor Signal Fail-Main & Sub
C1293	Wheel Acceleration sensor front-LH
C1294	Wheel Acceleration sensor front-RH
C1300	LF/RF External Interference Failure
C1300	TPMS ECU IRX not responding
C1301	Unmonitored Tire Installed
C1306	RF Internal Interference Failure
C1306	Internal vehicle RF source e.g. scanner
C1306	RF Internal Interference Failure
C1306	Internal vehicle RF source e.g. scanner
C1310	Last run was broken (Retraction)
C1312	Sensor 1 Radio Frequency Channel Failure
C1312	Front Left Sensor RF Channel Failure
C1312	Sensor 1 Radio Frequency Channel Failure
C1313	Front Right Sensor RF Channel Failure
C1313	Sensor 2 Radio Frequency Channel Failure
C1314	Rear Left Sensor RF Channel Failure
C1314	Sensor 3 Radio Frequency Channel Failure

Hyundai - Specific Trouble Codes

Trouble code	Fault location
C1315	Rear Right Sensor RF Channel Failure
C1315	Sensor 4 Radio Frequency Channel Failure
C1316	Spare Wheel Radio Frequency Failure
C1316	Spare Sensor Radio Frequency Channel Failure
C1317	Sensor 1 Wrong Type Installed
C1318	Sensor 2 Wrong Type Installed
C1319	Sensor 3 Wrong Type Installed
C1320	Data from EEPROM not Valid or Hardware Defects
C1320	Sensor 4 Wrong Type Installed
C1322	Front Left Sensor Over Temperature
C1322	Sensor 1 Over Temperature
C1323	Front Right Sensor Over Temperature
C1323	Sensor 2 Over Temperature
C1324	Rear Left Sensor Over Temperature
C1324	Sensor 3 Over Temperature
C1325	Sensor 4 Over Temperature
C1325	Rear Right Sensor Over Temperature
C1326	Sensor 5 Over Temperature
C1326	Spare Sensor Over Temperature
C1332	Front Left Sensor Fault
C1332	Sensor 1 Fault
C1333	Front Right Sensor Fault
C1333	Sensor 2 Fault
C1334	Sensor 3 Fault
C1334	Left Rear Sensor Fault
C1335	Rear Right Sensor Fault
C1335	Sensor 4 Fault
C1336	Spare Wheel Sensor Fault
C1336	Spare Sensor Hardware Fail
C1336	Sensor 5 Fault
C1336	Spare Sensor Fault
C1337	Left Front Low Frequency Initiator Fail Pulse Detected
C1337	Sensor 1 LFI Fail Pulse Received
C1338	Right Front Low Frequency Initiator Fail Pulse Detected
C1338	Sensor 2 LFI Fail Pulse Received
C1339	Right Rear Low Frequency Initiator Fail Pulse Detected
C1339	Sensor 3 LFI Fail Pulse Received
C1339	Right Rear Low Frequency Initiator Fail Pulse Detected
C1340	Sensor 4 LFI Fail Pulse Received
C1341	Sensor 1 LFI Channel Failure

Trouble code	Fault location
C1341	Left Front Low Frequency Initiator Channel Failure
C1341	Remote Crash Sensors Cross Coupling
C1341	Auto Location Failure FL
C1341	LF Failure - Front Left
C1342	Sensor 2 LFI Channel Failure
C1342	Right Front Low Frequency Initiator Channel Failure
C1342	Auto Location Failure FR
C1342	LF Failure - Front Right
C1342	Right Front Low Frequency Initiator Channel Failure
C1343	Auto Location Failure RL
C1343	LF Failure - Rear Left
C1343	Left REAR Low Frequency Initiator Channel Failure
C1343	Sensor 3 LFI Channel Failure
C1344	Right Rear Low Frequency Initiator Channel Failure
C1344	Sensor 4 LFI Channel Failure
C1344	Auto Location Failure RR
C1345	Front LF Failure
C1345	Front Low Frequency Initiator Channel Failure
C1346	Rear Low Frequency Initiator Channel Failure
C1346	Rear LF Failure
C1351	Sensor 1 LFI Open/Short Failure
C1351	Left Front Low Frequency Initiator Open/Short Failure
C1352	Encoder RH - signal
C1352	Sensor 2 LFI Open/Short Failure
C1352	Right Front Low Frequency Initiatorl Open/Short Failure
C1352	Sensor 2 LFI Open/Short Failure
C1353	Pressure sensor (Wh1) – electrical
C1353	Right Rear Low Frequency Initiator Open/Short Failure
C1353	Sensor 3 LFI Open/Short Failure
C1353	Pressure sensor (Wh1) – electrical
C1354	Pressure sensor (Wh1) – other
C1354	Sensor 4 LFI Open/Short Failure
C1355	Multiple Sensor ID's Received (Cross Talk)
C1355	Pressure sensor (Wh2) – electrical
C1356	Pressure sensor (Wh2) – other
C1357	SCC or DBF deceleration plausibility error
C1358	AVH not Available due to EPB in Emergency Release
C1358	ACC acceleration plausibility error
C1359	SCC Control Unit Error
C1360	ESP Irreversible Error

Trouble code	Fault location
C1360	ESP Torque Control Disable
C1361	Camera H/W Failure
C1362	Camera Signal Failure
C1363	Camera Signal Error for Calibration
C1364	Not found Reference Point
C1365	Invalid Reference Point
C1366	Camera Not Calibarted
C1367	Internal Signal not Plausible
C1368	PAS Sensor - Rear Left Outer
C1369	PAS Sensor - Rear Left Inner
C1370	PAS Sensor - Rear Right Inner
C1371	PAS Sensor - Rear Right Outer
C1372	PAS Sensor - Front Right Outer
C1373	PAS Sensor - Front Right Inner
C1374	PAS Sensor - Front Left Inner
C1375	PAS Sensor - Front Left Outer
C1376	SPAS Sensor - Front Left
C1377	SPAS Sensor - Front Right
C1404	CAN Bus Off
C1410	Undervoltage Detected
C1420	Overvoltage Detected
C1430	Overtemperature Detected
C1501	Switch Failure
C1502	ECS Switch Fault
C1503	TCS/ESP Switch error
C1503	TCS/ESC (ESP) Switch Error
C1506	Closed Throttle Position Switch
C1509	Door Switch Fault
C1513	Brake Switch Circuit
C1513	Brake Switch Error
C1514	Valve Switch-ON Time Exceeded
C1520	Clutch Signal Error
C1522	Head lamp Switch Fault
C1522	Headlamp switch signal line open
C1523	Limit switch LH - signal
C1524	Limit switch RH - signal
C1525	ECS Switch Signal Line Open/Short
C1525	ECS Switch Signal Open/Short
C1526	Down Hill Brake Control (DBC) Switch Error
C1527	Reverse Gear Signal Error

Hyundai - Specific Trouble Codes

Trouble code	Fault location
C1528	PAS Switch Indiator Failure
C1529	SPAS Switch Indicator Failure
C1530	PAS Switch Failure
C1531	SPAS Switch Failure
C1603	Derating (EPS Thermal Protection)
C1603	ECU thermal protection
C1603	Derating (EPS Thermal Protection)
C1603	ECU Internal Thermal & Voltage Error
C1603	Derating (EPS Thermal Protection)
C1604	ECU (Brake System) Hardware error
C1604	EPS Module (pre-charge circuit) Malfunction
C1604	ECU Hardware Error
C1605	CAN Bus Off
C1605	CAN Hardware Error
C1606	ECU Software Error
C1610	TCS-TCU communication line or TCS side malfunction
C1611	Vehicle signal (VSS) time out
C1611	CAN Time-out EMS
C1611	Lost Communication with ECM
C1612	CAN Time-out TCU
C1612	CAN Time-out TCM
C1612	Lost Communication With TCM
C1613	CAN signal error ECM (Check ECM)
C1613	CAN signal error EMS (Check EMS)
C1613	CAN Wrong Message
C1613	CAN signal error EMS
C1614	CAN time-out HCU
C1615	ABS-TOD Communication Line Error
C1616	CAN Bus Off
C1616	CAN Communication Bus Off
C1617	EMS Invalid Engine Speed
C1618	EMS CAN Engine Torque Error
C1619	EMS Plausibility Fault
C1620	1st set-up not completed (Height Sensor Not Cailbrated)
C1620	First Setup Not Completed
C1620	Alignment Failed
C1621	Excessive Operating Temp.
C1621	Vehicle Speed Sensor Fail
C1622	EMS invalid vehicle speed
C1622	Engine Speed Signal

Trouble code	Fault location
C1623	CAN Time-out Steering Angle Sensor
C1623	Lost Communication with Steering Angle Sensor
C1624	CAN time-out SCC
C1624	CAN not-OK Steering angle sensor
C1625	CAN Time-out ABS/ESC (ESP)
C1625	CAN Time-out ABS/ESP
C1625	CAN Time-out ABS/ESC
C1625	Lost Communication With Anti-Lock Brake System (ABS) Control Module
C1626	Implausible Control
C1627	CAN Time-out 4WD
C1627	4WD CAN Signal or Communication Error
C1628	CAN Timeout - Cluster
C1629	Cluster Invalid Counter
C1632	Cluster Control Switch Fail
C1633	Cluster Invalid Displayed Speed
C1634	Speed Correction Signal Error
C1635	TCS Invalid Counter
C1636	TCS Invalid ACCEL_REF_ACC
C1637	TCS Invalid aBasis
C1638	CAN time-out SCC
C1638	ACC Communication error
C1638	SCC Communication Error
C1638	CAN time-out SCC
C1639	Lane Prediction Error
C1640	CAN Message Failure - Dashboard
C1641	CAN signal error ECM
C1641	CAN signal error EMS
C1642	CAN signal error ESC (ESP)
C1642	CAN signal error ESC
C1642	CAN Message Failure - ESC (Check ESC)
C1642	CAN signal error ESP (Check ESP)
C1642	CAN Message Failure - ESC (Check ESC)
C1643	CAN Time-out Yaw Rate & Lateral G Sensor
C1646	CAN Message Failure - TCU
C1646	CAN signal error TCU
C1647	CAN Hardware Error - Sensor Channel
C1648	CAN signal error EMS for SCC (Check EMS)
C1648	CAN signal error ECM for SCC (Check ECM)
C1649	CAN time-out ECM for SCC

Trouble code	Fault location
C1649	CAN time-out EMS for SCC
C1650	CAN signal error SCC
C1651	CAN time-out EPB
C1652	CAN signal error EPB
C1653	CAN time-out Cluster for SCC
C1654	CAN time-out Cluster for EPB
C1655	CAN signal error TCU for EPB
C1655	CAN signal Cluster for EPB
C1656	CAN signal error Cluster
C1660	Receiver RF Circuit Fail
C1660	Receiver Radio Frequency Circuit Failure
C1661	Receiver EEPROM Failure
C1661	EEPROM Event Section Full
C1663	Auto Location Failure
C1664	Initiator/LF/RF Circuit Failure Not Affecting RSSI Level (High Line Only)
C1664	CAN signal error SCC for VSM
C1665	Initiator supply circuit short to ground
C1666	Initiator supply short circuit to 12V OR Open circuit
C1666	Initiator supply circuit short to battery or Open circuit
C1668	Watchdog Reset
C1668	Internal failure detection
C1670	Auto Learning Failure
C1671	LF1 Data Open/Short to GND
C1672	LF2 Data Open/Short to GND
C1673	WHEEL_FR Failure
C1674	WHEEL_FR Time Out
C1680	VSM EBS Error
C1684	CUbiS Hi-Speed CAN Communication Error
C1685	CUbiS Diagnostic CAN Communication Error
C1686	CubiS Multimedia CAN Communication Error
C1687	CAN Time-out MDPS
C1688	MDPS signal error
C1689	CAN Time-out VSM
C1690	Invalid CAN data VSM
C1691	Bluetooth Communication Error
C1692	CAN Time-out VSM
C1693	CAN Signal Error VSM
C1694	CAN Time out - FATC
C1695	CAN Message Failure - FATC

Hyundai - Specific Trouble Codes

Trouble code	Fault location
C1698	
C1699	
C1700	Byte Coding Error
C1702	Variant Coding Error
C1704	EPS Module (fail safe relay stuck) Malfunction
C1704	ECU Fail-Safe Relay Fail
C1705	ECU Precharge Circuit Fault
C1705	EPS Module (pre-charge circuit) Malfunction
C1706	A Vehicle Body Distortion
C1707	A Vehicle Body Lopsidedness
C1708	Level Control Disabled
C1709	Level Control Out of Range/Target Level not Applicable
C1710	ALI Not Completed
C1711	Improper program termination
C1736	CUbiS External Memory Error
C1737	CUbiS MCU Error
C2003	Maximum retractions exceeded (PSB)
C2101	Motor relay circuit
C2108	Compressor Relay
C2112	Valve Relay Error
C2124	Actuator Relay
C2126	Vacuum Pump Relay Drive Pin Open/Short
C2126	Vacuum Pump Relay Drive Pin Open/Short
C2130	Brake Lamp Relay Error
C2131	ESS Brake Lamp Relay Error
C2202	Latching Failure/Mechanics
C2203	CDC Actuator Failure - Front Left
C2204	CDC Actuator Failure - Front Right
C2205	CDC Actuator Failure - Rear Left
C2206	CDC Actuator Failure - Rear Right
C2212	Front-LH Actuator Malfunction
C2216	Front-RH Actuator Malfunction
C2220	Rear-LH Actuator Malfunction
C2224	Rear-RH Actuator Malfunction
C2226	Output Voltage Short to Battery or Short to Ground
C2227	Excessive Temperature Of Brake Disc
C2228	TCU Signal Error For ACC
C2228	CAN signal error TCU for SCC
C2230	Solenoid Current Error
C2231	Vacuum Pump System Fail

Trouble code	Fault location
C2232	SPAS Speaker Failure
C2302	Air Spring Valve-FL Open/Short
C2302	Solenoid Valve Failure - Front Left
C2303	Air Spring Valve-FR Open/Short
C2303	Solenoid Valve Failure - Front Right
C2306	Solenoid Valve Failure - Rear Left
C2307	Air Spring Valve-RR Open/Short
C2307	Solenoid Valve Failure - Rear Right
C2308	Front-LH Valve error (Inlet Valve)
C2312	Front-LH Valve error (Outlet Valve)
C2316	Front-RH Valve error (Inlet Valve)
C2320	Front-RH Valve error (Outlet Valve)
C2324	Rear-LH Valve error (Inlet Valve)
C2328	Rear-LH Valve error (Outlet Valve)
C2332	Rear-RH Valve error (Inlet Valve)
C2336	Rear-RH Valve error (Outlet Valve)
C2338	Reverse Valve 1 Failure
C2339	Reverse Valve 2 Failure
C2342	Ambience Valve Failure
C2344	Supply Valve (Reserver Valve)
C2366	TC Valve Primary (USV1) Error
C2370	TC Valve Secondary (USV2) Error
C2372	Electronic Shuttle Valve Primary (HSV1) Error
C2374	Electronic Shuttle Valve Secondary (HSV2) Error
C2380	ABS/TCS/ESC valve error
C2380	ABS/TCS/ESC (ESP) Valve Error
C2392	Air Spring Valve – Rear Left
C2393	Air Spring Valve – Rear Right
C2394	Exhaust Valve
C2395	Reservoir Filling Not Applicable
C2400	Motor Fault - Motor Not Running
C2401	Motor Position Sensor Error
C2401	Motor Circuit
C2402	Motor Electrical
C2409	Compressor Overtemperature
C2409	Compressor Overtemperature Detected
C2412	Motor circuit–Short to Battery or Ground
C2412	Motor Short or Open
C2413	Motor current fail
C2414	Motor Current–Excessive Overflow

Trouble code	Fault location
C2415	Motor Current–Insufficient Flow
C2416	Motor short or open - LH
C2417	Motor short or open - RH
C2418	Motor Stall - LH
C2419	Motor stall - RH
C2420	Motor temperature sensor high input
C2421	Motor Temperature Sensor Low Input
C2510	TREAD LAMP open/short circuit
C2510	Tread Lamp Circuit Failure
C2511	Diagnostic (TPMS) Lamp Short Circuit to 12V
C2511	Diagnostic (TPMS) Lamp Circuit Failure
C2511	Diagnostic (TPMS) Lamp Circuit Failure
C2512	Front Left LAMP open/short circuit
C2512	Indicator Left Front Circuit Fail
C2512	Front Left LAMP open/short circuit
C2513	Front Right LAMP open/short circuit
C2513	Indicator Right Front Circuit Fail
C2514	Indicator Left Rear Circuit Fail
C2514	Rear Left LAMP open/short circuit
C2515	Rear Right Lamp Short/Open Circuit
C2515	Indicator Right Rear Circuit Fail
C2710	In Line Test Failure-Not found Lane

U Codes

U0001	High Speed CAN Communication Bus off
U0001	CAN Communication Malfunction
U0001	CAN BUS Off
U0028	Vehicle Communication Bus A (LIN)
U0100	Lost Communication With ECM/PCM “A”
U0100	CAN Time out - FATC
U0101	Lost Communication With TCM
U0104	Lost Communication With Cruise Control Module
U0106	Lost communication With GCU
U0110	Lost Communication with Drive Motor Control Module
U0111	Lost Communication With Battery Energy Control Module “A”
U0114	Lost Communication With Four-Wheel Drive Clutch Control Module
U0115	Lost Communication With LPI Interface Box ECU
U0121	Lost Communication With Anti-Lock Brake System (ABS) Control Module
U0122	CAN TCS Communication

Hyundai - Specific Trouble Codes

Trouble code	Fault location
U0122	Lost Communication With Vehicle Dynamics Control Module
U0126	Steering angle signal fault
U0126	Lost Communication With Steering Angle Sensor Module
U0155	Vehicle Communication Bus A
U0155	Lost Communication With Instrument Panel Cluster (IPC) Control Module
U0164	CAN Communication BUS with FATC (Timeout)
U0164	Lost Communication with HVAC Control Module
U0164	Lost Communication With HVAC Control Module (FATC CAN Time Out)
U0293	Lost Communication With Hybrid Powertrain Contral Module
U0298	Lost Communication with DC to DC Converter Control Module
U0301	Software Incompatibility with ECM/PCM
U0401	Invalid Data Received From Hybrid Control Module
U0415	Invalid Data Received From Anti-Lock Brake System Control
U0416	Invalid Data Received From Vehicle Dynamics Control Module
U1000	Amplifer Unit Error
U1000	TV Unit Error
U1000	Head Unit ECM Error
U1001	HW Watchdog Executed
U1001	Microphone 1 not connected
U1001	HW Watchdog Executed
U1001	CAN Bus Off on H-CAN
U1002	Temperature Sensor Signal Error in TV
U1002	CAN Timeout EMS on H-CAN
U1002	Microphone 1 shortcut
U1003	Temperature Sensor Signal Error in Head Unit
U1004	Low Voltage Detected
U1004	CAN Timeout HCU on H-CAN
U1004	Temperature Sensor Signal Error in Tunner and Amplifier
U1005	High Voltage Detected
U1005	CAN Timeout MCU on H-CAN
U1006	Low Voltage Detected
U1007	High Voltage Detected
U1010	Low Voltage Detected
U1011	High Voltage Detected
U1045	Sticking Key on Central Control Panel
U1065	Sticking Key on Rear Armrest Controller
U1100	MOST network detects “critical unlock”
U1101	CDMA Serial Communication Error.
U1102	CDMA USB Communication Error.

Trouble code	Fault location
U1111	Battery Sensor fault detected by ECU
U1111	Lin Message Timeout with EBS
U1112	LIN Communication Error
U1138	Fan Operation Error (Fan is running although should be off)
U1139	Fan Operation Error - no plug put or line open (Fan is not running although it should be on)
U1140	Fan Operation Error (Fan is running although should be off)
U1141	Fan Operation Error - no plug put or line open (Fan is not running although it should be on)
U1200	Multimedia CAN Bus Off Error
U1201	Multimedia CAN Limp Home Status
U1401	MOST Critical Unlock Detected
U1440	Ring Break Between Head Unit and TV Unit
U1441	Ring Break Before Position 1
U1442	Ring Break Between TV Unit and Amplifier Unit
U1443	Mozen : Ring Break Between Amplifier Unit and Mozen Unit, Non Mozen : Amplifier Unit and Head Unit
U1444	Mozen : Ring Break Between Mozen Unit and Head Unit, Non Mozen : Ignore
U144F	Ring Break Without Position Detection
U1500	Wakeup Line Short Circuit To Ground
U1500	MOST bus communication lost during extended diagnostic session.
U1501	MOST network detects “critical unlock”
U1501	Wakeup Line Short Circuit To Vcc
U1540	Wakeup Line Test Failed at Amplifier Unit
U1541	Wakeup Line Test Failed at TV Unit
U1542	Wakeup Line Test Failed at MTS (Mozen) Unit
U1600	MOST bus communication lost during extended diagnostic session.
U1601	MOST network detects “critical unlock”
U1601	Data Upgrade Error - Application Software Code 1 Missing or Corrupted
U1602	Data Upgrade Error - Application Software Code 2 Missing or Corrupted
U1606	Data Upgrade Error - Application Software Data Missing or Corrupted
U1700	DTCP Sink SW error.
U1702	DTCP Sink Decode error.
U1710	Amplifier stage group 1 Error - S/Woofer 1 (+) , 1 (-) short circuit
U1711	Amplifier stage group 2 Error - S/Woofer 2 (+) , 2 (-) short circuit

Trouble code	Fault location
U1712	Amplifier stage group 3 Error - Front Middle/Tweeter LH & RH short circuit
U1713	Amplifier stage group 4 Error - DECK LH, DECK RH, Center Speaker short circuit
U1714	Amplifier stage group 5 Error - Front LH & RH short circuit
U1736	Sticking Key on Wireless Remote Control
U1750	HDD Invalid Media
U1751	Function “Delete Navigation database” Executed
U1900	GPS Antenna Line Break
U1920	DVD Drive Error
U1940	Front Display SDC Communication Error
U1940	AmFm Antenna circuit Low (shortcut to GND)
U1940	DMB Antenna Circuit - Open Circuit
U1941	AmFm Antenna circuit Open (not connected)
U1942	Rear Display SDC Communication Error
U1942	Fm2 Antenna circuit Low
U1943	Fm2 Antenna circuit Open
U1944	XM Antenna circuit Low (UTA US only)
U1945	XM Antenna circuit Open (UTA US only)
U1965	Central Control Panel Serial Communication Error
U1970	Multimedia CAN Bus Off Error
U1971	Multimedia CAN Single Line Error
U1972	Multimedia CAN Limp Home Status
U1980	Timeout Multimedia CAN Message (Air Conditioner, Cluster, Audio)
U1981	Timeout Multimedia CAN Message (Vehicle Speed)
U1982	Timeout Multimedia CAN Message (Body CAN Signal - Camera, ECS, Trip Computer, Alternator, Auto Light)
U1983	Timeout Multimedia CAN Message (Trip Computer)
U1984	Timeout Multimedia CAN Message (Inhibitor Signal)
U1985	Timeout Multimedia CAN response for HU_6 0x86 CarSettings request

HYUNDAI

PDI "AT-A-GLANCE"

Use this handy checklist to ensure that our first steps toward customer satisfaction have been taken.

- ✔ Check Tire Pressure Settings
- ✔ Conduct MIDTRONICS Battery Test
- ✔ Check Exterior/Interior for Cleanliness
- ✔ Set the Clock and Radio Presets
- ✔ Inspect, then Place Glove Box Materials
- ✔ Verify Remote Keyless Entry Function